



A STUDY OF
MUGHAL IMPERIAL COSTUMES AND DESIGNS
DURING 16th AND 17th CENTURY

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CERTIFICATE

This is to certify that the thesis entitled '**A Study of Mughal Imperial Costumes and Designs During 16th and 17th Century**' is the original work of **Pooja Chaudhary** completed under my supervision. The thesis is suitable for submission for the award of the degree of **Doctor of Philosophy** in History.

(Prof. Fatima Zehra Bilgrami)
Supervisor

ABSTRACT

The costume is the basic necessity of mankind or any society. In other words we can say that costumes are the reflection of an age. My Ph.D. thesis is concerned with the style of costumes and designs developed under the Mughals during 16th and 17th centuries. The Mughals were known not only in India but all over the world for their costumes and designs.

In this thesis an attempt has been made to enquire into the nature of the costumes, designs, fabrics, industry and the technical aspects of the Mughal attire. The book illustrations, biographies and the auto-biographies of the Mughal emperors, imperial albums and the accounts of European Travellers are the main sources of information to reconstruct the history of Mughal costumes in a disciplined manner.

The book illustrations are inclining this work to reflect how the Mughals were bearing the legacy from Central Asia and how this Central Asian taste of the costumes influenced by the indigenous culture. This story further explores the intermingling of two different identities which led to the resurgence of a new taste for the costumes.

The primary sources have not discussed much about the costumes and designs of Mughal rulers, yet we have some information at many places when the daily events of the Mughals like wedding ceremony, weighing ceremony and coronation etc. are described. Here we find the reference of the dresses also. But it is a matter of concern that the primary sources are not discussing the costumes separately, except *Ain-i-Akbari*, where the imperial wardrobe is very well discussed.

In the present work I have tried to correlate the sources available on the costumes of the Mughals with visual evidences to maintain a balance in reproducing the facts about the costumes of the Mughals by utilizing the information available in the primary sources, travelogues and the pictorial albums. This work is an analytical study of various types of imperial garments preferred by the imperial Mughals and the aristocracy along with the changes introduced in the costumes from ruler to ruler. For example during early Mughals particularly during the reign of Babur and Humayun there was a greater influence of the Central Asian style of clothing.

In the costumes of Babur and Humayun we find some thickness in the clothing material. They were continuing with the heavy *qabas* and *gadar* types of long coats.

The remarkable changes were introduced by Akbar in the costumes of the Mughal Court. The Emperor himself introduced different dress codes to the Mughal court. He not only made the changes in the costume but also renamed them. It is considered that Akbar was very far sighted ruler as he renamed the dresses to make the Hindu nobles familiar with the court costumes of the Mughals.

On the basis of a glance of the Mughal paintings one can clearly notices the taste of the Mughal rulers about their outfits. They were very particular about their dressing sense. The court scenes of the reign of early Mughals clearly reflect the simplicity of the garments with less decoration e.g. in the court scenes of Akbar we find the courtiers were wearing very simple costumes, whereas the costumes of the reign of Jahangir were very gorgeous which reached to its apex during the reign of Shah Jahan. The Mughal court scenes also reflects that how the changes in the dresses were occurred from ruler to ruler e.g. the length of the *jama* was increasing from Akbar to Aurangzeb.

The present study is an assessment of the the nature of the designs of the Mughal costumes. In the early Mughal painting there is an extensive use of geometrical designs on the costumes like during the reign of Akbar which continued up to the reign of Jahangir to some extent. After Jahangir's visit to Kashmir we find a shift from geometrical motifs to the floral motifs. And the use of floral designs reached its apex during the reign of Shah Jahan, whereas Aurangzeb's reign was marked by a setback in cultural field. In this way the present work explores about the differences among the area of interest of the different rulers e.g. during the reign of Jahangir we find that there was the dominance of naturalistic art ,which was later during the reign of Shah Jahan was replaced by the stylized form of art .

This work clearly shows, how the pictorial evidenced of the reign of different rulers indicate the differences in the designs preferred by them e.g. in the court scenes of the reign of Akbar, Jahangir and Shah Jahan we can clearly make a difference as the courtiers of the reign of Akbar were wearing the costumes particularly designed with geometrical motifs, and the court scenes of the reign of Jahangir clearly visualize the costumes designed with naturalistic art influenced by the European herbal books whereas the costumes of the reign of ShahJahan were very styled and embellished with heavy *zari* embroidery.

I explored here the quality of the fabrics preferred by the Mughal aristocracy. The Mughal paintings reflect the quality of fine material used for the purpose of making these costumes. The nature of the fabric was not only to reveal the pomp and show of the Mughal court but at the same time they were very comfortable also. The fabrics preferred by the Mughals were *Jamdani muslin*, *brocades*, and *pashmina* made of very fine *pashm* wool. The Mughals were wearing the dresses of such a fine fabric that some of the time the upper garment *Jama* clearly gives a glimpse of the highly decorated lower garment or *paijama*. Some of the paintings of Mughals clearly reflect these type of the costumes of very fine material. In this way here this thesis also helps us to co-related the Mughal painting with the text available about the fabrics in the Mughal sources.

This study helps to assess the nature of the widely expanded Mughal textile Industries. Though at that time these were not full fledged industries like today's India. In spite of that the products the Mughals *Karkhanas* surpassed almost all the contemporary powers. The products produced in the imperial workshops were so fine that the Indian textiles got a vast market outside India. The reason behind all this flourishment was the patronage provided by the Mughal Court. The extension of the textile *Karkhanas* was so vast that it covered the entire Mughal India. The imperial workshops were so extensively scattered that perhaps very few or none of the Indian place was left where cloth was not produced. India was known for its silk brocade, *pashmina*, fine *muslins*, all over the world.

This study further emphasizes on the technical complexity of the products produced in these textile workshops. Though the method of producing clothes remained the same. Either it is the manufacturing process of cloth or it is about its technique of decoration, the Indian technicians were competing with the contemporary world market. This work also focus on the different textile technique, most of which were the continuation in the technique e.g. spinning ,weaving, bleaching, dyeing, printing and painting. In spite of that the products produced here were very gorgeous.

In this way the Mughals costumes were the mark of their glory not only in India but all over the world. The Mughals are well known for the pomp and show of

their court. And these costumes were no doubt symbolizing their glory in the contemporary world.

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INTRODUCTION

INTRODUCTION

Clothing is the basic necessity of mankind along with shelter and food. Costumes are the reflection of one's profession, occupation and social standing. Costumes are also a mark of one's material prosperity. The study of costumes of any people is in fact an endeavour of unfolding the total cultural evolution of that area and its inhabitants. The nature of the costumes of a particular age is determined by several factors i.e. geographical, historical, social, religious, cultural, economic as well as the occupation of the people. The climate conditions of a particular area also play an important role in determining the costumes of a particular race.

The term 'Costume' is derived from the Latin consuetude, which means a complete set of outer garments. Costumes are used not only to cover the body and embellish it; they are also the non-verbal medium of communication and also the reflection of the cultural identity of a person, means to which community or country the person belonged to. The costumes are also the major source to understand the fashion trends prevalent during a particular historical age.

Indian costumes are as varied as the people of India residing on a vast country. Their life style and clothes are described in literature and art. India was invaded several times. Some of the invaders lived in India and ruled for several years and some went away to their homeland. Among them some important were Sakas, Kushans, Scythians, Huns, Turks, and Mughals. This all led to the inter-mingling of their cultural identities with the native people. These multi-cultural influences collectively altered and shaped Indian costumes. This is the reason that India is a hub of the several fairs, festivals and different religious ceremonies, which inspired the weavers and artisans to create special religious costumes and textiles in India. The special costumes were not only made for religious occasions but for the marriage ceremony also.

When we talk about the Mughals. The cultural renaissance of the Mughal era was an output of the synthesis of Persian and Indian sensibilities that took root around the main centres of power. The Mughal rulers were well known with India's rich artistic heritage and gorgeous textiles and they further contributed to the promotion of the skills of the large populations of weavers, dyers, printers, and embroiderers,

whose knowledge of finishing the textiles was invaluable. The miniature paintings of the Mughal period are the main sources to know about the exotic costumes and dresses worn by them. These paintings have described the choice of ruling class about how to wear and what to wear. The costumes were also the symbol of their status and hierarchy

The rich cultural heritage of the Mughals make a glorious chapter in the history of Indian costumes. A large variety of coats for the men, caps, turbans, skirted gowns, sleeved jackets and tight breeches for the women were the parts of this cultural heritage. The religion and culture of the Mughals had made a permanent mark on Indian History. The intergrowth of the old and the new forms of costumes and designs resulted in a new style of clothing which paved the way for further reforms in the style of clothing.

A humble attempt is made here to reproduce the facts related to the Mughal imperial costumes and designs during the 16th and 17th century. The costumes in this work have been studied from a group of Mughal miniatures of the 16th and 17th century. They are attributed to the Persian artists employed by Humayun at his Mughal court at Kabul during his exile from India. The court costumes worn during the reign of Babur and Humayun were of Turkish or Mongol origin. In *Baburnama* we find the reference of the several dresses. The Mughal kings were very particular about new fashions and variety in dresses. Humayun invented several kinds of new dresses, particularly the one called *ulbaghcha*, it was a waist coat, opened in front. Gulbadan Begum in her *Humayunnama* describes different types of dresses. Akbar was well aware of the uselessness of such thick clothing in the sub-tropical Indian climate and he introduced the substitute for the coats, cloaks and caps worn by his forefathers made from fine Indian textiles.

The main source to know about the costumes of Akbar's reign are the miniature paintings of Akbar from the illustrated manuscript of *Akbarnama* in Victoria and Albert Museum, London. The long peaceful reign of Akbar gave rise to an atmosphere of creativity, in which innovative clothing style was introduced. According to Abul Fazl Akbar himself took interest in the fashioning of court clothing i.e. he introduced *Chakdar Jama* to his court which was already in use in Indian society. Akbar introduced some changes in it by removing its slits or *chaks*, earlier it

was tied on the left side and Akbar has ordered it to be tied on the right side. It was during the reign of Akbar that the fusion of Hindu and Persian clothing style took place in Mughal courts.

Abul Fazl in his *Ain-i-Akbari* gives a glimpse of Emperor's mind. There was an ideology behind the reformation of Indian costumes by emperor Akbar. The influence of Hindu costumes and designs mainly the Rajput elements is well shown in the paintings of Mughal period. By introducing the change in the names of the costumes Akbar wanted to make the Muslims familiar with Hindu traditions and Indian style of clothing, at the same time he wanted to make them feel pride by using Iranian mainly to remove the communal disturbance. This all synthesis between the two cultural identities led to the development of gorgeous style of clothing.

This study intends to explore the textile designs preferred by the Mughals. Every social or religious group had its own norms regarding the colour, design and material of their garments when we focus on the designs used for the purpose of decorating these costumes, the natural forms were woven in a highly decorative and stylized manner. When the essence of a pattern were assimilated the designer implement his own interpretation of it. In this way a leaf could be evolved into a flower or bird form. Textile designs inspired by foreign patterns were used in such a way that they lost their alien nature e.g. the Persian *Shikargah* (hunting scene) pattern using trees, creepers, flowers, birds, animals, became the specialty of Mughal textile designs.

Flowers and floral vine patterns were a popular decorative element. The Mughals adorned gardens and decorated their buildings and textiles with stylized representation of nature. The most exquisite textiles produced in the 17th century were decorated with the damask rose, the opium poppy, the iris and the lily, which recur in elegant, dancing rhythms on the costumes, carpets, tent hangings, cloths and garments. At Jahangir's court use of these floral designs began to appear to a great extent. Jahangir in his *Tuzuk-i-jahangiri* describes different types of flowers when he asked Mansur, the famous painter at his court to paint the flowers of Kashmir Valley.

The textile designs popular during the Mughals reign were based on South Asian and Persian designs particularly. In the early 17th century paintings we find a shift from an idealized Persian floral motifs to the naturalistic ones, which was the

result of visit of European merchants emissaries and Jesuit missionaries. These visitors brought with them books, tapestries, and paintings which were of great curiosity to the Mughal court. In the block printing images, the plants of botanical books are depicted in highly detailed manner. The naturalism articulated in the European botanical studies was adapted by Mughal designers to suit the local tastes. This all is well described by Robert Skelton in his work '*A Decorative Motif in Mughal art*'.

Early floral designs depicted single plants with large flowers, thin wavy stems, small leaves and roots, but during the later period they became dense and detailed. In mid –seventeenth century, the taste for naturalistic floral sprays reached an apex of artistic expression. During the reign of Shah Jahan we find the pre-dominance of floral designs either it is costumes and textiles or architecture. In his works S.C. Welch has shown in his work '*The Art of Mughal India*' the depiction of the floral motifs in his work on the costumes of the period of Mughals. During Shah Jahan's reign we find the pre-dominance two types of floral compositions: floral sprays, readily identifiable as iris, roses, lilies and peonies among other varieties; and trellis patterns, within which a blossom is featured. During the later Mughal period there was the pre-dominance of the *buta* or *Kalga* motif. This is well reflected with the help of visual representations used in this thesis.

The present study also focuses on the fabrics used for making the Mughal court costumes. The Mughals preferred very fine fabrics and the most dazzling were velvets, brocades, metal-ground cloths, and plain weaves made from silk or from silk mined with other fibres usually cotton, fine *muslin* cloth was also used by the Mughal royalty during the summers. These fabrics were very expensive, sumptuous and frequently woven with designs used in other imperial arts of the period. During the Mughal period Indian textiles were exported in large number to the west and the east by the Portuguese, Dutch, French and the British East India Company. The traveller's accounts like Bernier's '*Travels in the Mughal Court*', Manucci's '*Storia-do- Mogor*', Sir Thomas Roe's '*The Embassy of Sir Thomas Roe to the Court of Great Mughals*' helps us to know about the fabrics used in India for making the costumes and other textiles.

Brocade was a silk stuff combined with the designs of flowers, foliage and ornaments. India's figured silk industry also flourished during this period. The silk brocades were the most preferred among all. *KamKhab* or the cloth of dream was commonly used for luxurious silk fabrics. *Alacha* is described as a silk cloth of 5 yard long with wavy line patterns running in length. Yashodhara Agarwal has given the plates of magnificent Banaras Brocades in her work '*Silk Brocades*'. The pure silk is known as *Gulbadans* produced in Tanjore and Tiruchirapalli. In which a large quantity of gold thread is used. *Taftas* were the 'plain silk goods' originally. The term *tafta* is also used for the mixed fabric of silk and wool. *Taftas* were also 'striped stuffs of silk and cotton'. *Patolas* were also very popular silken stuffs, very soft, decorated all over with flowers of various hues.

Velvet has remained the costume of the aristocratic class during the Mughal period. It became the sign of the pomp and show of the Mughal court. The Mughal Emperor themselves were using it for the ceremonial purposes. In comparison to the other fabrics it was the most preferred fabric at the Mughal court.

The Indian Textile art witnessed a new efflorescence under the Mughal patronage. Fine *muslins*, gold and silver brocades, fabulous weaves, printed and painted fabrics, intricate embroideries and endless variety and designs began to be manufactured on a large scale. Both Akbar and Jahangir were highly interested in the development of textile art which later on evolved into a distinct Mughal style. When we closely scrutinize the paintings of Akbar's reign, we find the pure co-existence of Safavi designs and pre-Mughals traditional Indian style.

The sophistication of Indian cottons, particularly from the eastern regions of the country were famous for its fineness throughout the world. The transparent *muslin* cloth was highly favoured by the Mughal court which is well described by Watson J. Forbes in his work '*The Textile Manufactures and the Costumes of the People of India*'. No other fabric can compete the delicacy of *muslin* of India. Plain *muslin* were produced almost all over the northern India. But the most famous among all were the *muslins* of Dacca.

The *jamdani* cloth or *muslin* figured with different patterns was also in vogue during the Mughal rule. Among all the figured *muslins*, *jamdanis* were the most preferred. In *jamdani muslin* the handmade designs were used while weaving the

cloth, which produced the effect of embroidery. In *jamdani* weaving gold, silver and coloured thread were used. Cotton fabrics are the most preferable products of India.

The Mughal rulers were drawn to Kashmir because of its climate and its natural beauty and it became the summer residence of the Mughal court which led to the Persian and Middle Eastern influence on the crafts of Kashmir. Kashmir was most famous for its intricately woven and embroidered shawls. The designs of the Shawls were further enhanced by the *Kanni* method of weaving, in which the design were formed by the manipulation of small wooden sticks called *tojis*, which interlocked the coloured thread as they completed each weft of the shawl. This complex technique of shawl weaving is known as twill-tapestry. But the most famous and popular of all the Kashmiri shawls was the most fine *shah tush* shawl which was made from the hair of the *Chiru* antelope, extremely famous for its warmth and softness. In the book of Frank Ames we find the illustrations of the 17th and 18th century Kashmir Shawls.

This study also attempts to make an enquiry of the textile industry of the Mughals. The Mughal Textile industry was the largest industry of India during the Mughal period. The Indian textiles comprising cotton, silks, carpets, velvets and satin constituted the foremost industry of India. The leading centre of production were Gujarat, Cambay, Ahamdabad, Pattan, Bengal, Kashmir, Agra, Lahore and Delhi, Cotton textiles enjoyed the largest markets, climatically and customarily.

According to Moreland before Akbar's rule, the silk weaving industry was still in its primary stage. Abul Fazl has quoted that Akbar extending the patronage to the industry and also encouraged the foreign artisans to settle in India. During his reign, brocades and superior silks were also imported from China and other Central Asian Countries in large quantities. Cotton textile industry was situated in almost all over India. No city, town, Parganah, Qasbah or village seems to have been devoid of this industry. In the sources as many as thirty two major centres of cotton production are found. The output of cotton goods led to the development of towns like Sirihind, Khairabad or Daryabad. Therefore the cotton Textile industry made a direct impact on the economy because the clothing constitutes the second basic need of mankind. Abul Fazl gives the reference of extremely fine exquisite *muslin* produced at Sonargaon, Banaras, Agra, Malwa, Deccan and Gujarat as also in Lahore, Multan, Burhanpur and Golkonda. Cotton weaving was the most extensive industry in India and the

magnitude and variety of its production impressed all foreigners. Use of wool was also confined to the rich classes. Akbar was very fond of wearing the different styles of shawls. Shawl weaving centres were set up at Agra.

The quality of the fabrics used at the Mughal court was so fine that these products were competing the contemporary world. Bengal and Gujarat were the main centres for the manufacture and export of the textile goods, because of their favourable location. Delhi in the North, Deogiri in Deccan, Cambay in Gujarat and places like Dacca, and Sonargaon in Bengal were the most famous centres of cloth manufacture Barbosa says, “Cambay was the centre of manufacture of all kinds of fine and coarse and printed cotton cloth, besides other cheap varieties of velvet, satins, taffetas, and thick carpets varieties of printed cloth and silk muslins were also manufactured in other parts of Gujarat”. The dyeing industry also flourished because of the taste of the people for bright colours. The Calico painting was also popular.

Here it is difficult to tell conclusively from miniature paintings whether the refined motifs that patterned the various pieces of clothing were painted, printed or embroidered. So far as the embroidery is concerned it appears that embroidery and embellishment of garments had reached a high degree of sophistication, during the Mughal period. Floral motifs were embroidered with a restrained use of gold, soft coloured threads and for garments of real splendour pearls and precious stones.

During Mughal period the techniques of the production of these textiles remained tradition. Indians were familiar with the tie-and-dye technique, which produced the *bandhini* and *patola* since the twelfth century. Indians also employed excellent dyeing technique and their vegetable dyes produced such fast colours that they were exported to England. The Indian dyers were unable to produce certain colours with silk material. Therefore silk dyers had to be brought from England to instruct the Indian weavers. Two silk dyers were appointed at Fort St. George in 1681 for dyeing in black and other colours. The same appointments were made at Qasimbazar in Bengal.

We find a very few reference of the attire of common people in Indian sources or traveller’s accounts. While it was the part of the every day’s scene of the Indian writers. Similarly we find the little accounts of the description of the costumes of the aristocracy. The Muslim influence on the Indian costumes was increasing day

by day which resulted in the growing demand for more better varieties of cloth. The raw material for the manufactures of these clothes were either provided indigenously or imported. The textile industry also provided incentives to other allied industries like embroidery, dyeing, printing and painting. The textiles produced in these industries were sufficient to meet the internal demands and the surplus was exported to the other countries.

With the disintegration of the Mughal Empire, began during the early 18th century, the Persian and Hindu artisans gathered around Agra and Delhi dispersed into the surrounding textile centres and their skills were absorbed in the newly emerged regional centres. With the decentralization of Mughal Empire, the trends were set in the regional courts, where the *angarakha*, *kurta*, and *chogha* became standard wear. In the absence of the unifying power, the fashions of the regional court began to evolve in their own and the homogeneity introduced by the Mughals began to disappear.

CHAPTER-1

DRESS CODES OF MUGHAL COURT

In each and every civilization costumes are the main sources to determine the polity, social status and hierarchy in any society. The costumes help to determine economic status too and to some extent culture and religion also.¹ The other important factors which determines the nature of costumes is the climatic conditions of the region. Costume is a set of clothes of a particular country or historical period. Costumes are the mirror of civilization. The different stages in a civilization urban, rural, tribal, feudal or industrial can be easily observed with the help of dress. The dress of the Mughals like their fine art and architecture was not completely confined to one race. The contemporary culture like that of Muslims or Hindus, Persians or Turks had influenced its culture. This great combination of different cultures contributed a lot to the development of the culture of the Mughals.

Costume design is the fabrication of clothing for the overall appearance of a character or performer. Costume is specific in the style of dress particular to a nation, a class, or a period. The most basic designs are produced to denote status, provide protection or modesty, or simply decorate a character.² Costume design is a tool to express an art form, such as a play or film script, dance piece. Costumes may be for a theatre, cinema or musical performance but may not be limited to such. In many civilization costumes reflect something more than mere clothing. Costumes reflect mainly the structure of society.

- **A Historical perspective of Mughal costumes:**

When we talk about the clothing of Mughal rulers in India we cannot forget that they had their roots in Central Asia and were the descendants of Timur and Chenghiz khan. They had their cultural roots in Samarkand and Mongolia. The weather of Central Asia is quite cold because it lies in far North. Therefore clothing was the necessity of that climate. People in Central Asia were making and wearing woollen cloths since 400 B.C. which was necessary to stay warm and dry in cold weather. From 500 BC, Scythian people and Mongols living in Central Asia wore robes and pants by spinning hemp or leather. Central Asian people invented pants because they were useful for men and women who spent a lot of time riding horses.

¹ Dhar, S.N., *Costumes of India and Pakistan :A Historical and Cultural Study*, 1969, Bombay, p. 1.

² Phyllis G Tortora, Eubank Keith., *Survey of Historic Costume*. New York: Fairchild Publications. 2005, p. 1

Around 1000 AD, the Mongols were still wearing mostly hemp clothing like the earlier Scythians. But instead of tunics, the Mongols sewed the hemp into long jackets which was overlapped in the front and tied at the waist like a bathrobe. By the 1200 AD the Mongols invaded India and China, where they learned about cotton and silk clothing. After that, while some Mongol clothes were still made of hemp, others were made in the same style, but of cotton or silk. Underneath these jackets, Mongol men, like earlier Scythian men, still wore hemp or cotton pants, tucked into leather boots. In winter, men wore fur vests, short fur caps, and fur-lined leather, hemp, or cotton hats.

The form of art and architecture began in 13th century reached to its zenith under the Mughals. The costumes and designs developed under the Mughals were unique and gorgeous in their forms and styles. The Mughal Emperors were liberal in their outlook. They were great patrons of art, literature, music and architecture. Besides the Mughal Emperors were fond of adopting new dress and new fashion which synthesized their own culture, contemporary culture and the indigenous culture. They maintained a separate section for textiles and royal garments known as the *jamakhana* or *toshakhana* (treasure house).³ Although a number of dresses were in use under the Mughals, the basic attire for a courtier consisted of a *pyjama* or *shalwar*, a *jama*, a *patka* and a *pagree*.⁴

Nature of the Costumes of the Mughals:

During the reign of Babur the link to their homeland was strong, and there was a greater influence of Persian style of costumes during this period.⁵ For the costumes of the reign of Babur the main sources are the miniature paintings painted under the patronage of Mughal emperor Akbar. Therefore there may have been an influence of the costumes of Akbar's period. The dresses which were in vogue during the reign of Babur were *futa*⁶ (bathing coat), *qara-quzi-burq*⁷ (black lamb-skin cap), *duwulgha-burq*⁸ (hemp-cap), *char-qab*⁹, *taq-band*¹⁰ (girdle), *jiba*¹¹ (surtout), *chapan*¹² (long-

³ Kumar Ritu, *Costumes and Textiles of Royal India*, London, 1999, p.38.

⁴ M. Dye Joseph: "*Fabrics, Carpets and Costumes*" in "*Romance of Taj Mahal*" by Pratapaditya Pal, London, 1989, p. 191.

⁵ Goswamy B.N.; *Indian Costumes, in the collection of the Calico Museum of Textiles Ahmadabad*, 1993, p14.

⁶ *Baburnama* or *Tuzuk-i-Baburi*, vol-1, tr.by A.S. Beveridge, New Delhi, 1970, p.275,527.

⁷ Ibid., p.258.

⁸ Ibid., p.167.

⁹ Ibid., pp.304, 527.

coat), *nimcha*¹³ (short tunic) *kiping*¹⁴ (rain-coat). Similarly during the reign of Humanyun we find the greater influence of Persian style of costumes as he had Persian artists at his court during his exile at Kabul¹⁵. On the costumes of the reign of both Babur and Humanyun the Persian influence was a dominant character.

Babur invaded India in 1526, when he came to India he was not very satisfied with Indian style of clothing as mentioned in the *Baburnama*. The low class Indian he says, 'Their peasants and lower classes go about naked. They tie on a thing which they called *langoti*, which is a piece of cloth that hangs down two spans from the navel as a cover to their nakedness. Below this pendent modesty-clout is another slip of cloth, one end of which they fasten before to a string that ties on the *langoti* and then passing the slip of cloth between the two legs bring it up and fix it to the string of the *langoti* behind. The women too have a *lang*, one end of which they tie about their waist and the other is thrown over the head.'¹⁶ He gives the reference of a short wrap-around garment like the *dhoti*. Then, Babur gives us the information about Turkish or Mongol garments. The costumes during the reign of Babur and Humayun are almost the same i.e. *qaba*, *jama*, *pirahan*, *jilucha*, *jiba* and *kasaba*.¹⁷ Under the rule of Babur and Humayun the costumes were in use like *jama* (garment with lining); *yaktahi jama* (garment without lining); *charqab* (gold-embroidered garment); *postin* (a coat lined with sheep-skin), a *jiba* or *surtout*.¹⁸

During the reign of Mughals robbing ceremony was very famous which encouraged the production of fine dresses. The Mughals were reinforcing their authority by frequent gifts of robes of honour.¹⁹ Babur rewarded men of religious eminence, kinsmen, faithful followers and the representatives of potential rivals with robes of honour and other gifts²⁰.

Similarly during the reign of Humayun the tradition of giving of robes of honour on different occasion was continued. In *Humayunnama* we find the reference

¹⁰ Ibid., p.156.

¹¹ Ibid., p.303.

¹² Ibid., p.187.

¹³ Ibid., p.652.

¹⁴ Ibid., p.38.

¹⁵ Kumar, Ritu, op. cit.

¹⁶ *Baburnama*, S. Beveridge, op. cit., p. 519.

¹⁷ Goswamy, B.N. op. cit., p.14.

¹⁸ Ibid.

¹⁹ *Baburnama*, S. Beveridge, op. cit., p.685.

²⁰ Ibid., p. 537.

of 12,000 robes of honour which were given out to Sultan Khwaja Gulbadan's cicerone amongst other presents.²¹ This is the reason that during this time we find variety of dresses and dress codes for example Humayun gave birth to a new kind of dress known as *ulbagcha*. *Ulbagcha* was a waist-coat, which was opening in front, hanging down to the waist over the coat or *qaba*. Humayun also adopted the ritual of choosing colours of his costumes according to the movement of the planets, which resembles with the Hindu's ritual of choosing colour according to the season²². But we find a very little paintings surviving from the period of Babur and Humayun. Therefore it is not easy to determine the dresses as shown by the painters. But it is true that we find a greater influence of foreign style on these costumes.²³

The court costume of Babur's and Humayun's reign i.e. *qaba*, *jama*, *pirahan* were of Turkish or Mongol origin. It was during Akbar's reign that the synthesis of Hindu and Persian Muslim clothing style came into existence. Akbar was a very far-sighted ruler. He was not in favour of clothing style of his forefathers because such a thick-clothing was not suitable for Indian climate. But at the same time if we observe the things minutely we come to the point that the changes in the costumes introduced by Akbar were also politically motivated. He was in need of service of Hindu nobles, this is the reason that he adopted some of the Indian dressing styles, introduced some changes and also renamed them.

As we know fashion had always been the parasite of great rulers but there was always an ideology of great men behind this tendency of fashion. When Akbar reformed the Indian costumes by making the synthesis between the Indian and Persian style, there was also an ideology behind this. The influence of Hindu costumes and designs mainly the Rajput elements is well reflected through the paintings of the Mughal period²⁴. Akbar had also changed the names of the costumes because he wanted to make the Muslims officials familiar with Hindu traditions and Indian style of clothing, on the other hand Hindu elites began to feel pride by using Iranian, mainly to remove the communal disturbance.²⁵ This gives and take between both of the cultures led to the emergence of new form of clothing. This gorgeous costume's style was not in any way inferior to another style of costumes of the contemporary

²¹ Gulbadan Begum ; *Humayunnama*, trans. A.S. Beveridge, New Delhi, 1983, p.69.

²² Kumar Ritu, op. Cit.

²³ Goswamy, op. cit., p.14.

²⁴ Coomarswamy A.K.; *History of Indian and Indonesian Art* , London, 1927, p. 128n.

²⁵ Dhar, op. cit., p.38.

world. Mohd Husain Azad said that the intimacy between the two communities developed to such an extent that on the one hand the Muslim courtiers discarded their beards with their long robes and Persian turbans and adopted the Indian costumes on the other hand the Hindu noble took pride by wearing the Iranian form of costumes.²⁶

Costly dresses worn at feasts or presented to the nobles and servants of the state as a mark of honour were also of a wide variety. Every season, a thousand complete suits (*saropa*, dresses from head to foot) were made for the Imperial wardrobe and were presented to the nobles of different ranks.²⁷ *Ain-i-Akbari* mentions that thousands of robes of costly material were made in each season and 120 were always ready²⁸. The materials used in the dress were usually *silk*, *doria* (striped cloth), *zarbaft* (varieties of cloth woven by golden thread), *tiladoz*, *mukkeskar*, *Kamkhwab* (cloth made of gold). *Kalabattu* and *muslin* especially the *muslin* of Malwa (different fabric used for dresses) was very popular. The merchants were ordered to send it only to nobles and courtiers of the Mughal court²⁹. The difference of the dress of royalty and nobility and middle class lay in quality, material, price and style.

The assimilation of fashion of two different entities can be described in various ways. During the early Mughal rule, Hindu men of rank in the employment of the government were obliged to present themselves on state occasions dressed in the same fashion as their conquerors. Therefore, there was a compulsion to them and it was resisted, and on their return to their homes they discarded the costumes they had been forced to assume, and reverted to their original costumes and which they regarded as belonging to their race. Because, wearing of the Mohammedan costume was an emblem of defeat to them, or a symbol of submission.³⁰ During Akbar the rebel officers were pardoned with robes of honor and were turned to loyal.³¹ It must be remembered, however, that this change of costume was only imposed upon those who were placed in some sort of authority; and therefore the new costumes, in fact, became the evidence that its wearer occupied a position of more or less importance and on the one side it could be a sign of prestige or the religious feeling would have

²⁶ Azad, Mohd. Husain *Ab-i-Hyat*, Lahore, 1834ca, 1910, p.16.

²⁷ Abul Fazl, *Ain-i-Akbari*, vol. 1. trans. H. Blochman, Delhi, 2011(reprint), p.96.

²⁸ Ibid., p.96.

²⁹ Della Valle, *The Travels of Pietro Della Valle in India* ed. Edward Grey, London, 1892, p. 44.

³⁰ Watson J. Forbes, *The Textile Manufactures and the Costumes of the People of India*, London, 1866, p.11.

³¹ Abul Fazl *Akbarnama* tr. by H. Beveridge, vol.2, Delhi, 1972, p. 119/77, 229/148.

led him to resist.³² For some other purposes also this tradition of bestowing robes of honour was continued i.e. Akbar send robes of honour with a condolence message to Raja Man Singh on the death of his son.³³ We find a number of incidents of ceremonial robbing in Abul Fazl's *Akbarnama* i.e. Sayyid Beg the envoy of Shah Tahmasp Safavi of Persia arrived at Agra received a special robe of honour with a horse.³⁴

These might be the reasons that Akbar renamed the dress by using Hindi words, with some minor changes. Thus, for *jama* or coat he used the term *sarabgati* (that which covers the whole body); for *izar* or trouser he used the term *yarpairahan* (the companion of the coat); for *nimtanah* or *jacket*, *tanzeb* (adornment of the body); for *fautah* or make bathing dress, *patgat* (protector of modesty); for *burqa* or veil, *chitragupita* (concealer of the face); for *kulah* or cap, *sissobha* (the glory of the head); for *muybaf* or hair-ribbon *Keshghan* (to bind hairs); for *patka* or lion cloth, *katzeb* (a piece of cloth for waist); for *Paizar* or shoes, *charandharan* (supporter of foot) etc.³⁵

We find the influence of Persian language on these terms because it was the time of emergence of composite culture. This intermingling of the terms used for dresses was only confined to the royal court, did not reach to the common people³⁶. But Dhar thinks that intermingling of two communities as discussed above had reached to such an extent that the Mughal nobles had discarded their beards, long robes and Persian turbans (*jubba-e-dastar*), and adopted the indigenous forms of dress.³⁷

The dresses which Akbar inherited from Babur and Humayun were the *jama*, the *farji*, the *ulbagchah* and the *shalwar*. Akbar was very fond of adopting new style of wearing, thus he brought into fashion many other garments, and adopted them according to his own requirements, in this way he had changed the whole style of wearing. He fashioned and designed his own garments. Akbar's historian has described a few articles of the King's dress which includes: the *takauchiya*, *peshwaz*, *dutahi*, *shah-ajida* (royal stitch coat), *suzani*, *qalami*, *qaba*, *gadar*, *farji*, *fargul*,

³² J. Watson, Forbes, op. cit., p.11.

³³ *Akbarnama*, op. cit., vol.3, p. 1142/784.

³⁴ Ahmad Nizamuddin; *Tabakat-i-Akbari*, vol.2, tr by B. De., ICS, Calcutta, 1936. pp. 262/263.

³⁵ Blochman, op. cit., pp. 93-94.

³⁶ Kumar, Ritu, op. cit., p. 40.

³⁷ Dhar, S.N., op. cit, p. 44.

chakman, shalwar.³⁸ There were various kinds of each of these garments and it was not possible to describe them. He introduced a new fashion of wearing shawls by wearing it in double folds. The wearing of the *shawl* (double-sided) has been termed by many scholars as *doshala*, i.e. a double faced *shawl* consisting of two fabrics attached at the underside with the fabric having two right sides and no wrong side³⁹.

During Akbar's reign the *takauchiya* became very popular garment, for summer as well as for winter. Moreover, it was a typical Indian garment, it was a first garment which was changed from Persian to Indian style, and also giving an indication that the Mughals were Indianized in the true sense⁴⁰. It was tied on the left side.⁴¹ In his age, the *takauchiya* replaced the *jama* which seems to have fallen in to disuse. His silk garments were embroidered in gold. The other garment which he used during the summer was the *qaba*. It was mostly made out of fine cotton stuff. The dresses of Akbar's period are appropriate to the different climate than that of the northern plains of India. With Akbar a number of changes were introduced in costumes, as documented by Abu'l Fazl. Abu'l Fazl's evidence is invaluable because, while documenting the imperial dresses he gives a picture of Emperor's mind in matters of designing and renaming dresses.⁴²

Therefore, the Mughals made a deep and far-reaching impact, not only on the politics of the country but on its life-style. Not only the centers of like Agra, Lahore and Delhi, but also the courts not directly subject to the Mughal rule were also affected. At the same time, the Mughals themselves took a lot from India.⁴³

According to Abul Fazl, Akbar was wearing *takauchiya*, a coat with a round skirt and tied on the right side. *Dutahi*, was a coat with lining, *shahajida*, a royal stitch coat, with sixty ornamental stitches per *girihi*. *Suzani*, a silken coat with cotton inside *qalami* is the same; *qaba* wadded coat, *gadar*, wider and longer than the *qaba*, was used in place of fur coat.⁴⁴

Akbar himself took a great interest in improving the materials used for making dresses. The cloth used for making these fabrics was mainly coming from South India

³⁸ Blochmann, op. cit., 1997, pp. 94-97.

³⁹ Ibid., p.98.

⁴⁰ Goswamy, op. cit., p.15.

⁴¹ Dhar; op. cit., p. 44.

⁴² Goswamy, op. cit., p.16.

⁴³ Ibid., p. 17.

⁴⁴ Dhar, op. cit

or foreign countries.⁴⁵ Bernier speaks in his account that the presents and gifts i.e. *brocades, fine lenins* and *alachas* or silk stuffs were continuously passed between the Great Mughals and neighbouring kingdoms.⁴⁶

Probably about eleven thousand tailors were appointed for the manufacture of cloths for royal household and the robe which emperor wore on his birthday was so gorgeous that it took about a whole year to complete. The Dacca *muslins* of his time were so fine that they were not visible to the eye when made to float on water⁴⁷. The fashion prevailed during the Mughals not only attracted the royal people but to foreign travelers also.⁴⁸

We can not specify the history of costumes of any particular age. Under the Mughals costumes and designs changed according to the taste of emperor, so we cannot give any exact date for the introduction of any new costume, changes in the costumes emerged according to the taste of emperor i.e. Jahangir introduced *nadiri* (a type of coat that they wear over a *qaba*).⁴⁹

Under the Mughals changes and innovation were constantly introduced, in the costumes. As we know under the Mughals fashion was changing according to the taste of an Emperor. During the reign of Jahangir the ideology behind the introduction of costumes remained the same as Jahangir not only shaved his own chin but also induced his courtiers to do the same. In one of his references to the dresses described by him in his Memoirs, he says: “having adopted for myself certain special clothes and cloth stuffs, I gave an order that no one should wear the same but he on whom I might bestow them.”⁵⁰ One was a *Nadiri* that they wear over a *qaba* (a kind of outer vest). Its length is from the waist down to below the thighs, and it has no sleeves. It is fastened in front with buttons, and the people of Persia call it *Kurdi* (from the country of the *kurds*). I gave it the name of *Nadiri*.⁵¹ In the *Tuzuk* we find the reference of *nadiri* at many places. At one place Jahangir mentions that Nur-Jahan prepared a feast

⁴⁵ Ibid., p.45.

⁴⁶ Bernier, *Travels in the Mughal Court* tr. Constable and Smith, Oxford, 1934, vol.1, p.120.

⁴⁷ Ibid.

⁴⁸ Blochmann, op. cit., p.87.

⁴⁹ *Tuzuk-i-Jahangiri* tr. by A. Rogers and H. Beveridge, London, 1909-14, vol.1, p.384.

⁵⁰ Ibid.

⁵¹ Ibid.

for the victory of Shah Jahan and conferred on him dress of honour of great price with a *nadiri* with embroidered flowers.⁵²

There are a number of written accounts given by foreign travellers. Sir Thomas Roe, who was the ambassador of the King James I of England at the court of Jahangir tells about the attire of the king Jahangir at the time of his departure for Ajmer He says that the King's coat was made of cloth of gold without sleeves upon a *semian* as thin as lawn. There seems to be some mistake here as "*semians*" were coarse calicoes used chiefly for awning (hence the name from Persian "*Samiana*", a canopy).⁵³

Jahangir reserved for himself a particular dress consisting of *nadiri*, *chiltah* was the other quilted royal coat.⁵⁴ The *qaba*, used during emperor Akbar also was considered a sign of dignity .It may be full or half sleeved. It was opened in front with full length and was without buttons. It was made of costly cloth with a folded collar known as '*batugiriban*'.⁵⁵ In addition there are a number of references to the presentation of costly gifts to noblemen as a mark of favour that included jewelled daggers and swords embedded with precious stones. For cap the terms *dastar* or *chira*⁵⁶ are used, Jahangir also mentions *jigha*⁵⁷, a bejewelled ornament⁵⁸, jewelled tunics made of gold spun fabric or the *charqab* .

According to French traveller Francois Bernier, "The king Jahangir appeared seated upon his throne, at the end of the great Hall, in the most magnificent attire. His vest was of white and delicately flowered satin, with a silk and gold embroidery of the finest texture and was a turban of gold cloth, had an aigrette whose base was composed of a diamond of an extraordinary size and value."⁵⁹

During the reign of Shah Jahan not such an important change was introduced in costumes and design because Shah Jahan was more interested in architecture in comparison to other art forms. But the delicacy, allegiance and pomp and show of the reign of earlier rulers continued under Shah Jahan⁶⁰. During his reign the degree of

⁵² Ibid., p. 397.

⁵³ Roe ,Sir Thomas ; *The Embassy of, to the court of Great Mughals* (1615-19), London, 1926, S. v. Brijbhushan, Costumes and Textiles of India, Bombay, 1958, p. 29.

⁵⁴ *Tuzuk-i- Jahangiri*, Op. cit. vol. 1, p-63.

⁵⁵ Ibid. p. 384.

⁵⁶ Ibid., p. 290.

⁵⁷ Ibid., p. 248

⁵⁸ Ibid., p. 102

⁵⁹ Bernier, op. cit.

⁶⁰ Pal Pratapaditya, op. cit p.193.

sophistication in textile production reached to a remarkable stage⁶¹. Courtier's attires were not complete without accessories, thus during the reign of Shah Jahan we find the use of these items.⁶² But during the reign of Aurangzeb we find stagnation in the development of all art forms whether it is architecture and music painting or fashions.

Male Garments:

The main dress codes of males at the Mughal court are *jama*, *patka*, *paijama*, *kulah* etc.

Jama:

The *Jama* was mainly used as upper garment, lower limbs were covered with tight fitting trousers which is similar to the trouser in which Krishna is shown in Indian paintings.⁶³ *Jama* was a coat worn over a shirt. It was generally loose in fitting and long enough ping over the other going from left to right and was tied below the armpit with tassels. It was generally made from seven yards and seven *girihs* of cloth⁶⁴. **(pl. 1)** (Here Shah Jahan is shown wearing a full sleeves *jama* of pink colour, introduced by Mughals with beautiful floral motifs, which is tied from right to left with green colour tassels. It is assembled with a *churidar paijama* made with *zari* work, lined *patka* and a turban.) A special cloth was used for making *Jama* for rich people it was highly decorated and embroidered. Before the coming of Mughals the Indians were using an unlined cross-over tunic with slits around the skirt and a symmetrical hemline was famous in India since medieval times.⁶⁵ Akbar introduced changes in this garment and converted it into a gown by removing its slits, rounding the hemline and increasing the fullness of skirt and was fastened to the right side, which was fastened by the Hindu nobles on the left side,⁶⁶ and called it the *sarbgati*. The earlier type remained in fashion at the Mughal court during the last sixteenth century and early seventeenth century.⁶⁷

Takauchiya was more or less like that of the *jama* or *angarakha*, or worked as a protector of body.⁶⁸ *Jama* was also in vogue in Central Asia and China.⁶⁹ It was

⁶¹ Kumar Ritu, Op. cit., p.41.

⁶² Pal, op. cit.

⁶³ Coomarswamy, op. cit., pl. 258,

⁶⁴ Blochmann, op. cit. , p.94.

⁶⁵ op. cit., p.39

⁶⁶ Blochmann, op. cit., p.94.

⁶⁷ Verma S.P., *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi , 1978, p.47.

⁶⁸ Ghurye G. S., *Indian Costumes*, Bombay, 1951, .p.129.

adopted as an Indian garment in the sixteenth century.⁷⁰ Indians were using it before the coming of Mughals or it was famous among the Rajputs. Abu'l Fazl says that "The *Takauchiya* is a coat without lining, of Indian form, with slits in skirt and tied on the left side His Majesty has ordered it to be made with round skirt and to be tied on the right side."⁷¹ (pl. 2 In the upper part of this illustration, the upper two Rajput nobles are shown wearing Indian type of *jama* with slits in the skirt or *chakdar jama* and in the lower section two courtiers are shown wearing *jama* without slits which was introduced by the Mughal emperor Akbar at his court.) Several writers are aware of the differences in the tying of the *jama* by the Hindus and Muslims. There might be some exception, but the general rule remained the one described here.⁷²

The size and form of the *jama* had remained to be a matter of controversy. The word *jama* means outer garment for the upper portion of the body. There are so many term for outer garments in literature i.e. *qaba*, *jamah*, *jameh*, *jamo*, *baga*, *takauchiya*⁷³. In Persian, the word *jama* has several meanings a garment, robe, vest, gown, coat or wrapper. We find a very little difference between a *jama*, a *choga* and an *atmasukha*, all of these are long cross-over robes.

Akbar's attempt to alter the form of a garment is typical to understand. He made a plan to make this *jama* type of garment easily acceptable both to the Hindus and the Muslims, but he was conscious also of the fact that it was socially important for the Hindu and the Muslims to be told at right, so that no awkwardness of any kind arise. Therefore this singularly clever device that is only hinted at by Abu'l Fazl in his account, the Hindus were fastening it to the left arm-pit and the Muslims to the right armpit. Painting of Mughal period are the invaluable accounts to know about the dress codes. In spite of that we don't find any adequate description of the clothes. *A'in* gives a list of articles of Akbar's wardrobe.⁷⁴

The evolution of this garment was highly influenced by the different climatic condition of India – *Yaktahijama* (unlined *jama*) originally belonged to Central Asia, was probably introduced to India by the Scythians or Kushans in the second century,

⁶⁹ Coomaraswamy, *Catalogue of the Indian Collections in the Museum of Fine Arts Boston*, vol-5, Boston, 1923, p.27.

⁷⁰ Ibid., p.26.

⁷¹ Blochman, op, cit.

⁷² Goswamy, op. cit. p. 22.

⁷³ Kumar Ritu op. cit. p. 150.

⁷⁴ Blochmann, op. cit. pp. 93-98.

was also popular among the Rajputs⁷⁵. We find some evidences of this *jama* in Gandhara sculptors, on Gupta coins and in the wall paintings of Ajanta and Bagh caves. The earliest *double breasted jamas* probably originated from the colder parts of central Asia and China⁷⁶. They were made of thick fabrics suited to mountaneous regions of the North India. Whereas in desert area the thick fabrics were not appropriate because of rearing heat and humidity. So, the use of light fabrics stated in India, but the problem was that the cotton was not suited to original cuts and formation of *jama*. So some modifications were done which led to the development of an Indian style *jama*, with the appearance of *chaks* (slite) and the addition of *kalis* (panels) which gave the cotton skirt a more interesting shape, known as *chakdar jama* which emerged a long before the appearance of Mughals in India.⁷⁷

During the reign of Akbar *jama* became the official court costume of Mughal India. The length of *jama* was also changing according to the taste of the emperor i.e. during Jahangir's (pl.3) and Shah Jahan's (pl.4) and Aurangzeb's (pl.5) reign the length of *jama* increased slightly in comparison to the earlier period.⁷⁸ (In plate .3 Jahangir is shown wearing a white coloured *jama*, and a *churidar payjama* with a double *patka*, red coloured turban and shoes. The length of *jama* of Jahangir's period is shown, which is up to knees or just below the knees whereas in plate 4 ShahJahan is shown wearing a yellow coloured *jama* ,and sky blue coloured *payjama* assembled with boots, a *patka* ,and a turban with a cross band. The length of the *jama* of ShahJahan's period increased up to the middle of knees and ankles or slightly below it or near to the ankles and in plate 5 Aurangzeb is shown wearing a white a coloured *jama* with a middle length yellow coloured *payjama* assembled with shoes and a red coloured turban. The length of this Aurangzeb's *jama* reached just above the ankles.

A few particulars regarding the articles worn by his Majesty may be of interest. The *Takauchiya* is a coat without lining price for making a plain one varies from one rupee to three rupees, but if the coat be adorned with ornamented stitching, from one to four and three quarters rupees. Beside a *misqal* of silk is required.⁷⁹

⁷⁵ Kumar Ritu op. cit. p. 150.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ M. Dye, Joseph, *Fabrics, Carpets and Costumes* , cited from Pratapaditya Pal's, *Romance of Taj Mahal*, 1989, New Delhi, p.191.

⁷⁹ Blochmann, op. cit. p. 94.

The *dutahi* (a coat with lining) required six yards and four *girihs* of the outside six yard lining, four *girihs* for the binding nine *girihs* for the border. The price of making one varies from one to three rupees. One *misqal* of silk is required⁸⁰. (The *dutahi* was a double folded garment, had four fastenings (*girahbands*).

The *shah-ajida* (or the royal stitch coat) is also called *shast-khatt* (or 60 rows) as it has sixty ornamental stitches par *girihi*. It has generally a double lining and is sometimes wadded and quilted. The cost of making is two rupees per *gaz*⁸¹ had no buttons, but had a binding all along the front up to the waist.

The *qaba* (pl.6) was usually made of costly cloth⁸². It could be made with a folded collar and embroidered with gold thread⁸³. It was worn by ladies also. In summer, the Indian courtiers wore the favourite dress of the Muslims – the *Qaba* a long loose coat of cotton or fine muslin with a folded collar. It was either worn open or crossed over in front from right to left⁸⁴. (plate 6 illustrates a *qaba*, a type of overcoat which is opened in front with half sleeves. It was worn over a *jama* and its length was around between the knees and ankles.)

The *gadar*- The *gadar* (pls. 7, 8) was a costly over garment and was generally used in winters. It is called Indian fur-coat by Blochmann⁸⁵. It was longer than the *farji* and had a border of fur running over the opening sides in the front. The *gadar* was made without collars with half or full sleeves. In Hindustan it takes a place of a fur-coat. It requires seven *gaz* of stuff, six yards of lining, four *girihs* binding, nine for bordering, 2½ s. cotton, 3 m silk. The illustration 7 exhibits an over coat with quarter sleeves which is opened in front, it is short in length in comparison to *jama*. Likewise plate 8 represents a Centre Asian youth is wearing a *gadar* over a *jama* type of garment with a turban of Centre Asian origin.

The *chiltah* was another quilted royal coat worn during Jahangir's time⁸⁶. According to Abu'l Fazl the *gadar* was a coat wider and longer than the *qaba*. In Hindustan, it was used as a *fur* coat⁸⁷.

⁸⁰ Blochmann, op. cit. 1977, p.95.

⁸¹ Ibid.

⁸² *Tuzuk-i-Jahangiri*, Op. cit., p. 63.

⁸³ *Tabaqat-i-Akbari*, Op. cit, II, p. 480.

⁸⁴ Verma, op . cit, p.48.

⁸⁵ Blochmann, op. cit., p.95.

⁸⁶ *Tuzuk*, Op. cit.

⁸⁷ Blochmann, op. cit.

The *fargul* is a garment resembling *yapanji* (a coat used in rainy weather) but more comfortable. It was stitched in many fashions and worn by everyone high or low. According to Abu'l Fazl it resembled the *yapanji* probably another kind of rain-coat. It was made of several stuffs. It required 9 *gaz* & 6-1/2 *giri*h stuff, the same quantity of lining, 6 *misqals* of silk and 1 *ser* of cotton. It was made both single and double⁸⁸. The *chakman* was also a coat used during rain.

We get a glimpse of Mughal fashions from the variety of dresses displayed in the paintings. Unfortunately, contemporary sources give inadequate description of clothes, this is the reason that the making their identification is difficult. The *A'in* gives a list of the articles of Akbar's wardrobe. The *Tuzuk-i-Jahangiri* adds to it e.g., the *pustin* (sheep skin coat)⁸⁹, and the *Jubba* (quilted waistcoat).⁹⁰ Jahangir presented his son Shahriyar with a jeweled *charqab* (coat), with a turban and a waist belt (*kamar-band*) on the occasion of his marriage.⁹¹ A number of dresses were in vogue during the Mughal period. Among them some important are the *farji*, the *gadar*, the *qaba*, *patka*, *katzeb*, etc.

The *farzi* (pl. 9, 10) was a winter costume, which resembles with *jama*. But unlike *jama* it was tied in the center, made with small turned collars. A full *farji* was tied at the waist with the *katzeb*.⁹² The illustration 9 and 10 contain a line drawing of the *farzi*. It is a short coat with full sleeves and folded collars, opened in front.) The *farji*, was a coat open in front, worn over *jama*. The *postin*, was also a coat, used in winter season. The *nimtanah* and *sozni* were also used by the Mughal Emperors. *Nimtanah* was perhaps a type of under-garment which resembles with *Kurtah*.

Lower Garments:

Shalwar or *Izar* (Drawers), *Paijama*:

Mughal's *shalwar* was the prototype of the trousers of today and was called a *churidar* but it was basically different in cut as well as in general appearance. It was probably introduced by Muslims⁹³. Trousers were also used in India during Kushana's period, but during the medieval period and in the modern usage; they are commonly

⁸⁸ Ibid.

⁸⁹ *Tuzuk-i-Jahangiri*, op. cit., vol.2, 125.

⁹⁰ Ibid., p. 177.

⁹¹ Ibid., p. 125.

⁹² Blochmann, op. cit., pp. 93-98.

⁹³ Verma, op. cit., p.49 .

regarded as the Mohammedan origin.⁹⁴ According to Abu'l Fazl the *shalwar* was made of all kinds of stuff, single and double and wadded⁹⁵. The word *paijama* is originated from the two Persian words, *pae* and *jama*, the first meaning 'legs or feet' and the second 'covering' thus signifying 'leg clothing'. As the name would indicate the *paijama* is an Islamic import into India even though the use of similar garments is seen during the Kushan and Gupta period, even if it had come in from outside, from the northwest to be specific⁹⁶.

The *shalwar* was loose fitting up to the knees and wrinkled below them. It was fastened on the waist by a string or *izarband* probably of knitted cotton or silk passed through the seam or *nefa* of the trousers. Akbar called it the *yarpirahan*⁹⁷. The evidence of the paintings, indicate that the tighter variety *churidar* (pl. 11) as seen in Mughal and Pahari works, was the standard article of wear. In plate number 11 Jahangir is shown wearing a fine muslin *jama* over a *churidar paijama* along with *zari patka* and red colour embroidered shoes. The *paijama* shown in this painting was probably made with the purpose that it could be easily appeared out of the muslin *jama* to show its design, it is a lined *paijama*, perhaps with the use of alternate *zari* and cotton lines.

Women are seen wearing tight *paijamas* along with the *peshwaz* or *jaguli*. Men likewise are seen wearing tight *paijamas* from the Akbari period for formal court dress that was sometimes made of rich patterned or striped silk⁹⁸.

Draped Garments:

SHAWL:

During the Mughals the production of Shawls reached its zenith. The Mughal rulers encouraged it to a great extent which led to the commercialization of the industry. As a result of Shawls began to produce on a large scale in India, this all brought a high perfection in its production.⁹⁹ Shawls were considered the valuable gifts among the contemporary empires. For every noble it was considered a sign of

⁹⁴ Ibid.

⁹⁵ Blochmann, Op. cit, p.96.

⁹⁶ Coomarswamy A.K., Op. cit., 1927, London, pl. 258.

⁹⁷ Blochmann, Op. cit, p.96.

⁹⁸ B.N. Goswamy, Op. cit., p.21.

⁹⁹ Abul Fazl, *Ain-i-Akbari*, Vol-2, op. cit , p. 358.

prestige.¹⁰⁰ The Mughal emperors were rewarding their allies, ladies of imperial harem, governors and special officials with robes of honour¹⁰¹. Jahangir in his *Tuzuk* describes shawls as one of his favourite item of dress.¹⁰²

When we talk about the shawls during the Mughals the first important type was *tus* shawls (**pl.12**) which are made of an animal of that name; its natural colours are black, white and red but chiefly black. An improvement was made in the width of all stuffs; Emperor Akbar had the piece made large enough for making a full dress.¹⁰³ The Illustration 12 exhibits one of the most beautiful Indian paintings to clearly display the early Kashmiri Shawl type characterized by very narrow side borders and a short *pallu* displaying rows of the most simple *buta* types.

Abul Fazl tells us about the procedure of storing the garments and speaks about the colours of shawls. The order of colours is as follows: *tus*, *safid-alcha*, ruby-coloured, golden, orange, brass-coloured, crimson, grass-green cotton flower coloured, sandal-wood coloured, almond coloured, purple, grape-coloured, mauve, like the colour of some parrots, honey coloured, brownish lilack, coloured like the *ratanmanjari* flower, coloured like the *Kasni* flower, apple coloured, hay-coloured, pistachio, *bhajpatra* coloured, pink, light-blue, coloured like the *galghah* flower, water-coloured, oil-coloured, brown-red, emerald, bluish like China ware, violet, bright pink, mango coloured, musk coloured like the *fakhat*.¹⁰⁴ A number of shawls were manufactured in Kashmir and Lahore. A kind of shawl called *mayan* was chiefly woven at Lahore. It consists of silk and wool mixed.¹⁰⁵

The Memoirs of Jahangir tells about a gift of *phup* robe to Mirza Raja Bhao Singh.¹⁰⁶ Dr. Moti Chandra believes *phup* means *puhupa* or Sanskrit *pushpa* (flower) and so the shawl probably was flower patterned.¹⁰⁷ The use of costly shawls was widely prevalent among the Mughals.

Francois Bernier, a Frenchman, who visited Kashmir in the mid-17th century, has left an interesting account of Kashmir shawls. Their two types were

¹⁰⁰ Bernier, *Travels in the Mughal Court* tr. Constable and Smith, vol.1, Oxford, 1934, pp.402-403.

¹⁰¹ Sarkar J.N., *Mughal Administration*, Calcutta, 1920, p.53.

¹⁰² *Tuzuk*, Op. cit., vol.2 (tr), p.578.

¹⁰³ Blochmann, Op. cit., p. 97.

¹⁰⁴ Ibid. pp. 97-98.

¹⁰⁵ Ibid.

¹⁰⁶ *Tuzuk*, Op. cit, vol.1, p. 297.

¹⁰⁷ Chandra Moti, "Kashmir shawls", *Bulletin of the Prince of Wales Museum*, 1954, Bombay, p. 246.

manufactured: one was the wool of the country, finer and more delicate than that of Spain; the other was wool or rather hair found on the breast of the species of wild goat which inhabits Great Tibet. Great pains were taken to manufacture similar shawls at Patna, Agra and Lahore but they could not compete with the delicate texture and softness of the Kashmiri shawls¹⁰⁸. By the middle of the 17th century Kashmir woollens particularly the shawls had achieved a widespread fame in Europe and in India it became popular as Kashmiri or *Kashmiria*.¹⁰⁹ These shawls were exported all over the world.¹¹⁰

Shawls had decorated ends enclosed by floral stripes and narrow floral strips which were running along the length on both sides. The motifs were usually floral. Today when one thinks of Kashmir woollen fabric, a cone shaped form known as *Turanj* or *Kalanga* comes in one's mind. The late 17th century shawls had a flowering plant motif woven on both ends in a row which was very common among Gujarat brocade weavers.¹¹¹ The main feature of early forms of shawls is that they were very natural and simple.

Shawls were generally hanged on the shoulder in different styles. It was put on the shoulder with folds. Akbar had ordered shawls to have two folds of four and gave it the name of *doshala*, *safidalcha* or *tarhdar*. Before the reign of Akbar it was mainly in two or three colours i.e. black, white or mixed, Akbar ordered it to be dyed in several colours. The *tus shal* was the costly variety of *shawl*, because it was very light in weight and very warm also. The *qab*¹¹² was another type of very fine *shawl*, both transparent and soft.

The *turban* or *Pagri* or a cap was mainly used by males, it also reflects the religion, region of origin and social status of a man.¹¹³ It was the most important and the most gorgeous costume at the Mughal court. In comparison to the other dress codes of the Mughal court, we find a great number of variations in turban used by the Mughals. The reason was that it was not simply a wearing but it was a sign of dignity

¹⁰⁸ Bernier, op. cit., 1972, vol.1, pp. 402-403.

¹⁰⁹ Sandesara, B.H. Varnaka Samuchhya, Baroda 1960, Part 2, p. 25.

¹¹⁰ Sarkar, J. N., *The India of Aurangzeb*, Calcutta, 1901, p. 111.

¹¹¹ Skelton, Robert, "A decorative motif in Mughal Art", in *Aspects of Indian Art* (ed. P. Pal), Leiden 1972, pp. 147-152.

¹¹² *Tuzuk*, op. cit., II, p. 527.

¹¹³ Kumar Ritu, op. cit., p.147.

and respect.¹¹⁴ Its main function is to protect the head from the heat of the sun. It was generally made of fine muslin like texture. Cotton was the most preferred material for the production of turbans. The people of higher classes preferred the silk material for the production of turbans.¹¹⁵ There was a great variety of turbans, i.e. *Mundeel* a turban of *muslin*, with gold stripes spots and ends usually worn by military officers. The *surbuttee* was another, this term is derived from the *sur*, the head and the *bandhua* to bind –*buttee* means twisted or coiled round. Other types were the *morassa* a short turban; *umamu*, a loose turban; *dastar*, a fine muslin turban, *shumla*, a shawl turban; *nastalik* a full dress turban made of fine quality of plain muslin, which was used as the court dress of darbar.¹¹⁶

Turban of high class was generally made of silk or cotton thread¹¹⁷. The cloth of three threads was folded in length and wrapped-round a *kulah* fitting the size of the head. There was a great variation in the length of turban. Generally it was so long that there was a need to suffice two, three or more folds of several loops. The *Turban* when it was unfolded, its width was up to 9 to 12 inches and 15-25 yards in length¹¹⁸ *Turbans* of kings was with cross loops.¹¹⁹ The Indian type turbans of nobles were of different shapes and were highly designed and decorated, they were tied by leaving a triangular crest above the crown.¹²⁰ **(pl.13)** In India turbans of different colors were used but the most prominent among all was the turban of white colour. Next to it, the red was the most common. Plate 13 exhibits the line drawings all Mughal king's and Prince's turbans with *kalgi* or without *kalgi*.

Babur has mentioned three types of *dastar*. He wound his turban in a fold *dustar-i-pech* which might have up to nineteen folds. In general, all *turbans* were in four folds known as *char-pech*. In those days people wore them without twisting and let the ends hang down¹²¹. The three fold *turban* was known as *sih-pech*¹²². Therefore, we can make difference on the basis of number of loops The head-gears of Babur and Humayun were like that of the Turks, with a projecting *kulah* in the center.

¹¹⁴ Dhar, op. cit., p. 47.

¹¹⁵ Watson J. Forbes; op. cit. , p.13.

¹¹⁶ Ibid.

¹¹⁷ Verma , op. cit., p.50.

¹¹⁸ Bhushan, op. cit., p.40.

¹¹⁹ Verma, op. cit

¹²⁰ Ibid.

¹²¹ *Baburnama*, tr. Beveridge, vol.1, op. cit., pp. 14-15.

¹²² Ibid., p.258 .

From Akbar onwards a number of changes appeared in the style and form of the turban: Akbar's flat and *atpati* was close to the head; Jahangir's a little looser; and Shah Jahan's much tighter and slopping towards the back, and with a cross band (Pl.14) holding it together¹²³. (In plate number 14 Shah Jahan is shown wearing a band over his cap which represents a Shah Jahani type of head gear in which he is shown wearing a band over it.) It was bedecked with pearls, and ornament fastened to ornate a turban with jewels and beautiful motifs. Jahangir gives the reference of *Jigha* – an ornamented turban.¹²⁴

The maximum number loops could be up to nineteenth. During the reign of Akbar, the Mughal court adopted the *Rajput Pagri*.¹²⁵ The common people were wearing the plain and simple cap known as *kulah*, whereas the aristocratic class were wearing the turbans with different forms and styles.¹²⁶ *Nastalik* was full court dress turban made of plain white *muslin* which was closely fitted to the head. *Mandil* was a *muslin* turban with gold stripes.¹²⁷

PATKA:

Another important dress code of the Mughal court was *patka* (*katzeb*). Though it was not a complete costume or dress, it may be called an accessory, of no less importance. It was a long cloth band essential to bind the long and heavy *jama*, *farzi*, *choga* etc. It was fastened around the waist in such a way that both the ends of it loosely hanged down reaching up to the knees.¹²⁸ These were often embroidered, brocaded and dyed in different colours. Golconda was the main center for making *patkas*.¹²⁹ These were richly embroidered with gold or silver thread and were common in use at the Mughal court.

In the paintings of Babur reign we don't find any clear reference of *patka* it was during the reign of Humayun some richness of textiles came into view. But it was only during the reign of Akbar we notice the reference of *patka* as a part of royal dress as mentioned above Akbar renamed a number of dresses by giving them

¹²³ Goswamy B.N. and Fischer Eberhard, *Wonders of a Golden Age: Painting at the Court of the Great Mughal*, Museum Rietberg, Zurich, 1987, p. 19.

¹²⁴ Rogers and Beveridge, op. cit., vol.1, p. 248.

¹²⁵ Coomarswamy, op. cit., p. 25.

¹²⁶ Blochmann, op. cit., p. 96.

¹²⁷ Bhushan, op. cit., p.40.

¹²⁸ Verma Som Prakash, op. cit., P.51.

¹²⁹ Bhushan, op. cit., p. 32.

different names of Hindi and Persian combination, he renamed *patka* as *katzeb*¹³⁰. The term ‘*kat*’ is derived from the sanskrit term *kati*,(‘waist’); and the Persian word ‘*zeb*’ means ‘adorning’. Thus this compound word means adorning the waist.¹³¹

During the reign of Akbar it was also known as *sash* which was generally made of cotton and was either plain or patterned with geometric motifs, and its ends were very long.¹³² In a portrait of Akbar’s period, Mir Musawwir shown holding petition in his hand is depicted wearing narrow *patka* (**pl. 15**) The knot is loose but graphically rendered; and the loop suspended from it is again very articulated.¹³³ During the middle of the Akbar’s reign the *patka* became little shorter, whereas during the reign of Jahangir this *patka* was made of some heavy material and this fabric was decorated with floral scrolls and a new thing was that it was supported by a second *sash* of fine muslin too.¹³⁴ One was the gold brocaded *patka* and the other was little shorter. Similar *patka* is seen in a painting where the emperor shoots an arrow at poverty.¹³⁵ Another example is that where the emperor presides over the weighing ceremony of the young prince Khurram (**pl.16**). In this painting Jahangir is shown wearing a double *patka* which was introduced during his period.¹³⁶ This double *patka* appears only in the portrait of the courtiers and the nobles are not shown wearing the second *patka*.¹³⁷

During the reign of Shah Jahan these *patkas* were highly decorated with silver and gold embroidery. During his reign *patkas* were made with large flowering plants motif on the short end-panels hanging in front.¹³⁸ The patterns which were in vogue during the Mughals were highly influenced by the motifs used in Mughal ornaments. Within the broad category of all Mughal style woven *patkas*, scholars first distinguished two general types based primarily upon their sizes, types of material, and their basic structures. So far as the motifs of *patkas*, the end-panels with the

¹³⁰ Blochmann, op. cit. p.96.

¹³¹ Goswamy B.N.; *Indian Costume: Patka: A Costume Accessory in the Collection of the Calico Museum of Textile*, vol-2, p.26.

¹³² Pal, Pratapaditya, op. cit. p.191,1989.

¹³³ Goswamy, *Indian costumes: patka*, Op. cit., p.26.

¹³⁴ Pal Pratapaditya, Op. cit., p.191, 1989.

¹³⁵ Vishakha N. Desai, *Life at Court: Art for India’s Rulers*, Boston, 1985, p. 27.

¹³⁶ Goswamy: *The patka*, Op. cit., p.39.

¹³⁷ Ibid. p.33.

¹³⁸ Ibid., p. 42.

flowering plants, are concerned these bear close resemblance with the floral designs seen in the miniatures and surface embellishment of architecture.¹³⁹

Thus the Mughal males were wearing different types of costumes. They were so much conscious about their wearing that they themselves introduced many of the costumes. The style of wearing the costumes was also changing from ruler to ruler. The early rulers like Babur and Humayun could not give attention towards their costumes as they had to give most of their time in the consolidation of Mughal Empire. From the time of Akbar the Mughals began to take interest towards their clothing style and the gorgeousness of this style reached its apex during the reign of Jahangir and Shahjahan.

Dress codes of Mughal Queens:

The dress of the royal ladies of early Mughal period (Babur and Humayun) seems to have been following the fashion of Khurasan and Central Asia. The women of the Emperor's household wore wide and loose, painted drawers¹⁴⁰. The Mughal women were also fond of adopting few fashion. They used to wear bright colour and richly designed dresses. Here we find the Iranian and Central Asian influence too.

According to Mannucci the cost of each female garment was about 40 to 50 rupees or sometimes it was more than this.¹⁴¹ Bernier observes, "The article of dress which lasts only few hours, may cost ten to twelve crown and even more when beautifully embroidered with needlework."¹⁴² A peculiar example of a royal lady dressed in male attire is notable. Nur Jahan the most influential Mughal lady is shown holding a matchlock and dressed in male attire. (pl. 17)

The gorgeous dressing sense of the Mughal ladies was not confined to the Mughal harem. But there were several occasions where the Mughals and the Hindu women came into contact with each other, a number of social gatherings were organized for the purpose. By coming into contact with the Hindu women the Mughal ladies began to bent towards more varied feminine dresses, the royal ladies of the Mughal court had started to wear ,sari eg., Roshan Ara Begum had tried a *sari*.¹⁴³

¹³⁹ Skelton R. , *A Decorative Motif in Mughal Art*", in Pal Pratapaditya (ed), *Aspects of Indian Art*, Leiden, 1972, pp. 147-152.

¹⁴⁰ Zaid , Zeenit; *The Magnificent Mughals*, Oxford, 2002, p.113.

¹⁴¹ Mannucci, *Storia do Mogor* (1653-1708); tr. William Irvine, Vol.2, Delhi, 2010,(reprint), p.340.

¹⁴² Bernier; op. cit., vol.1, p.259.

¹⁴³ Ibid.,vol.1,351

During the reign of Aurangzeb the Princess Zebunissa introduced a woman garment called *angiya – kurti*.¹⁴⁴

The Hindu and Muslim festivals were celebrated publicly where the ladies were also taking part.¹⁴⁵ Both Hindus and Muslim ladies of Harem wore similar dresses. In Humayun's times the ladies used a high crested cap called "*taqi*". It was worn by unmarried girls. The married women wore a *taqi* with a veil hanging called *lachaq* or *qasaba* which means a veil of caps used by married women in medieval times¹⁴⁶. Royal ladies were also entertaining the timely officials and their wives at their residence.¹⁴⁷ The Mughal emperors were organizing the fancy festivals too from time to time, known as Meena Bazars¹⁴⁸ which was particularly for women, except of the emperor and some important nobles. Rajput women were also participating in it.¹⁴⁹

The Mughal ladies of aristocratic class dressed themselves in very gorgeous costumes. They were very fond of adopting the new styles of fashion and designs. *Purdah* was in vogue during the medieval period particular among the aristocratic families. It was a sign of delicacy. Though the Mughal ladies were not going to the court, but many of the Mughal women exercised a strong influence in the political decisions too. They used to wear beautiful dresses with transparent and opaque fabric in a very delicate manner.¹⁵⁰

The most famous costumes used by the Mughal ladies were tight-fitting *paijama* or *shalwar*, a *choli* or bodice to cover the breasts; and a *peshwaz*, which was usually transparent, remained open from the front, had a v-neck, and its length was up to the ankles. The shirts of women were open in front and fastened to the neck, sometimes 'v' shaped collars were also used in these shirts. These shirts were made of silk, cotton with well-furnished gold and jewels embroidery. **(pl.18)** Here in this paintings dancers are dancing in a dance party, in it four dancers are dancing , out of which the first and last two are in Mughal attire shown wearing fine *muslin* ankle length upper garment the *peshwaz* and an ankle length *patka* with *churidar payjama*

¹⁴⁴ Misra, Rekha *Women in Mughal India*, 1967, Delhi, p.123.

¹⁴⁵ Coomaraswamy A. K.. *History of Indian and Indonesian Art*, London, 1927, p.131.

¹⁴⁶ Zaid, Op. cit, 2002: 113.

¹⁴⁷ Ibid.

¹⁴⁸ Bernier, *Travels in the Mughal Court* tr. Constable and Smith, vol.1 p. 272-73, Manucci, *Storia do Mogor*, Vol. I, p. 195.

¹⁴⁹ Tod, James, *Annals and Antiquities of Rajasthan* (London: 1829-32), Vol. I, pp. 401-402.

¹⁵⁰ Khandalvala, op. cit., p. 293.

and *odhani*, the third one is wearing a cap also. The second dancer in this row is wearing a *ghagra*, *choli* and an *odhani*).

Sometimes they used an assemblage with this shirt, which is known as a *yalek*, it was a type of long vest fastening to the ankles. The *yalek* had a series of buttons from the bosom to griddle. Sometimes it was half sleeved which may be the result of the necessity of the climatic conditions of the place for their waist the women were using a waist belt which was generally two fingers wide and was embellished with precious stones.¹⁵¹ Abul Fazl also mentions about a waist belt embellished with golden bells and gold wires known as *Kati-Mekhla* or *Chhudr-kantika*.¹⁵²

NurJahan, wife of Jahangir introduced some dresses. She had introduced a new dress '*Nur-Mahli*'. It was particularly used by bride or bridegroom. Nur Jahan had designed the clothes in very innovative styles. She had become the fashion queen of her age and people followed her designs with interest. Several varieties of brocades, lace and gowns were introduced by this queen. She introduced a light weight dress *dodami* (weight only two dams). Her *panchtolia scarf* was a substitute of *orhani*. She launched new patterns in (*Badla*, *Brocade*, *Kinari* (lace)). She made a *Nur Mahalli* (marriage dress) that cost only 25 rupees¹⁵³. Khafi Khan remarks that the "Fashion introduced by Nur Jahan governed the society and the old ones survived only among backward towns of Afghans."¹⁵⁴

Upper Garment

The dress codes for royal Mughal ladies were the *Peshwaz*, (a *jama* like garment), (**plate. 19**). A female upper garment known as *peshwaz* generally opened in front. Its length was almost up to the knees or varies according to the taste) the *Shalwar* or *Izar*, The *Burqa*, *Naqab* or *Chitragupita*. In harem the Mughal women were wearing a short tight bodice tops with midriff showing ankle-length loose pants under a thin long skirt and a large veil which covered their head not faces which is evident from the contemporary paintings.¹⁵⁵ When the Mughals came to India their women were wearing gowns, caps and trousers.¹⁵⁶ The *kartiji*, an inner garment was

¹⁵¹ Manucci, op. cit, p.36.

¹⁵² *Ain-i-Akbari* (tr), vol.3, p. 344.

¹⁵³ Khan, Khafi, *Muntakh-ul-Lubab*, Vol. I Trans. Mohammad Ahmad Farooqi, Karachi, 1963, p. 276.

¹⁵⁴ Ibid., p.275.

¹⁵⁵ Findly, E.B., *Noorjahan, Empress of Mughal India*, New York, 1993, p. 165.

¹⁵⁶ Dhar, op. cit., p. 38.

worn beneath the gown, as a short bodice reaching to the hips.¹⁵⁷ The *nimtana* was another jacket worn over the dress like a vest. Gulbadan Begum in her *Humayunnama* mentions about nine-jackets with jewelled *blase* (*nimtana*), while describing Mirza Hindal's marriage. She also mentions about four shorter jackets (*kartiji*) with belt trimmings among the articles of dowry for the bride sultana Begum.¹⁵⁸

The garment for the upper part of the body is described by Stavorinus¹⁵⁹ and Grose¹⁶⁰ as a pair of hallow cups and cases. Stavorinus writes "they support their breasts and press them upward by a piece of linen which panes under the arms and is made fast on the back".¹⁶¹ The bodices were sometimes brocade lined with pearls and attached to with a beautifully wrought clasp in diamonds and emeralds.¹⁶² It is said that the bodice was brought into fashion by one of Aurangzeb's daughters.¹⁶³ Some ladies were wearing half smocks reaching the waist which were made of fine cotton and silk through which their skin was quite visible. When they were going out they put on a waist coat over the smocks. The sleeves of this waist coat were reaching up to the middle of the arms.¹⁶⁴

The breeches (trousers) were common among the Mughal ladies. Its length was up to the ankle.¹⁶⁵ There was not much difference between the breeches of men and women. The women were trying it at the navel point which was tied with a silver belt hanging up to the knees.¹⁶⁶ These breeches were generally in tapering form and a little bit tight were preferred by most of the women.¹⁶⁷ These breeches were generally made of silk or brocaded mostly white or red in colour.¹⁶⁸

The Mughal ladies were also wearing joyful, a sort of empire-gown fastening a neck and waist, which was opened between the fastening and giving a glimpse of breasts and with long tight wrinkled sleeves and long flowing skirt reaching down to the ankles. During winter ladies of aristocracy wore *qabas* of fine wool of Kashmir.

¹⁵⁷ Ibid., p. 38.

¹⁵⁸ *Humayunnama*, op. cit, pp. 127-128.

¹⁵⁹ Stavorinus, *Voyages to the East Indies*, tr. S.H. Wilcocks (London, 1978), vol. I, p. 415.

¹⁶⁰ John Henry Grose, *A Voyage to the East Indies* (London: 1772), vol. I, pp. 142-143.

¹⁶¹ Stavorinus, vol. I, op. cit. p. 415.

¹⁶² Mathur, N.L. *Red Fort and Mughal Life*, New Delhi, 1964, p. 46.

¹⁶³ Dhar, op. cit., p. 40.

¹⁶⁴ Chopra P.N., *Some aspects of society and culture during the Mughal Age*, Agra, 1956, p. 12.

¹⁶⁵ Commissariat, M.S., *Mandelslo's Travels in Western India*, London, 1931, p. 50.

¹⁶⁶ Dhar, op. cit., p. 39,

¹⁶⁷ Della Valle, op. cit., p. 45.

¹⁶⁸ A.K. Coomarswamy, *History of Indian and Indonesian Art* (London, 1927) p. 131; G.S. Ghurye, *Indian Costume* (Bombay, 1966), p. 133; O. Rothfeld, *Women of India*, p. 190.

The texture of this wool was so fine it could pass through a small finger ring.¹⁶⁹ An elegant item of female dress in lace according to Manucci “They are in habit of adding. Normally ladies of Elite class wear two or even three garments, each weighing not more than one ounce and worth fifty rupees each. They sleep in these clothes and renew them every twenty-four hours, never put them again and give them away to their servants, they cover their heads with a sheet of cloth.”¹⁷⁰

Draped Garment

Head cover: Both Hindu and Muslim women were covering their head with an *orhni* or *dupatta*. Manucci describes the cloth used to cover the head¹⁷¹ was made of gold material. **(Plate 20)** Plate 20 represents Shaha Jahan in a green *jama* with his beloved who is wearing an ankle length *peshwaz* over a *churidar pajama* and the *Odhani*. The *odhani* covered the head and hung down on both sides up to the knees. It was sometimes, made of white calicos.¹⁷² The Mughal ladies were also covering their head with a shawl or mantilla made of a very fine material. The Mughal ladies were also wearing *taq* a cap, and were covering their head with a *lachak*, a kerchief folded crossway tied under the chin by two corners.¹⁷³

Gulbadan Begum in her *Humayunnama* mentions the *taq*, a type of cap worn by unmarried girls, and the *lachak* which was a kerchief folded cross ways and tied under the chin by two corners, used by married women.¹⁷⁴ The use of *taq* and *lachak* was confined to the princesses and daughters of nobles. The Royal ladies were also wearing turbans¹⁷⁵ which were embellished with precious jewels, and stones.¹⁷⁶

The Mughal women used *burqa* to cover their entire body.¹⁷⁷ They also put on *qabas* during winters. The *qaba* was made in Kashmir. Likewise the shawl used by Mughal women were made of fine wool were made in Kashmir.¹⁷⁸

Therefore the Mughal women played an important role in each and every aspect of life i.e., political, economic, social or cultural. Amongst them Gulbadan

¹⁶⁹ Manucci, Niccolao, op. cit., p.341

¹⁷⁰ Ibid.

¹⁷¹ Della Valle, op. cit. p. 141.

¹⁷² Rothfeld, *Women of India*, Bombay, 1928, p. 190.

¹⁷³ *Humayunnama*: Op. Cit. (tr.), p. 31.

¹⁷⁴ De Laet, *The Empire of the Great Mogul*, tr. J.S. Hoyland, New Delhi, 1974, p. 44; Manucci Storia.... Vol. II, p. 318.

¹⁷⁵ Manucci, Storia...., op. cit. Vol. II, p. 318.

¹⁷⁶ De Laet, op. cit.; Manucci Storia.... Vol. II, p. 181.

¹⁷⁷ Manucci, op. cit. p. 37.

¹⁷⁸ Ibid., p. 37.

Bano Begum, Nur Jahan, Jahanara are notable. As mentioned above Gulbadan Begum in her *Humayunnama* gives us a very relevant information regarding the costumes of Mughal period. Further Nurjahan herself is attributed for doing some inventions in the field of costumes.

Thus it is concluded that the costumes used by the Mughals were very gorgeous. The costumes of the early Mughals have some Central Asian influence as the major change in the costumes of the Mughals is marked from the age of Akbar. During the reign of Akbar the synthesis of two cultural identities was at its peak. As a result of this a number of reforms were introduced by the Akbar. This change or influence in the field of culture was further increased in the reign of Jahangir. Shah Jahan's reign was famous for the highly gorgeous costumes decorated with gold and silver embroidery. Where the reign of Aurangzeb is marked by a setback in almost all cultural fields. During the later Mughals this all development was shifted to the regional courts. It is evident from the contemporary costumes that the Mughal rulers themselves were taking interest in the development of different types of costumes. This all was so influential that even today we are enjoying the legacy of Mughals in the field of costumes.

CHAPTER-2

DESIGNS AND DECORATION RELATED TO THE MUGHAL COSTUMES

The Islamic invasion of India in the twelfth century led to a forceful encounter between different cultures and their artistic tradition. In Pre-Islamic Indian art we find the predominance of sensuously marrying human figures to those of animals and plants. Hindu temples were covered with massive nudes. In paintings of Ajanta we find the similar nudes whose fleshiness is shown by shading and highlights.¹

Whereas in Islamic art we find the essence of discretion. The representation of living things particularly of human being is regarded as unlawful. Though Quran says nothing on the subject but according to *Hadith* the Prophet stated that no angel would enter a house where images are found.² But it is not clear whether Prophet was saying about religious idols or figurative images. Therefore it might be said that it was confined to the mosque, madrasas and the sacred robes. The figurative paintings either in India or other countries were mainly done for books or albums and these books and albums come under private collection. Therefore it was not only a private art but also a princely art because only a prince was powerful enough to counter the prejudices against it.³

Textile design is a complete art in itself. Before the study of textile designs a complete study of weaving and printing technique is necessary. Textile designs are the result of the contribution of different sections of textile industry. So many processes are included for making textile designs varying from the raw material to the different techniques used in the process.⁴

Designs are always used according to the material. Designs are not merely copying of the motifs but it shows the concept of patterns and traditions. The Brocade designs were in vogue particularly under royalty⁵. Floral motifs were used to a great extent for designs. These motifs included flowers, creepers, sprays, springs, plants etc. Floral designs provided an unlimited scope to the textile designers⁶. Nature was drawn on clothes. The floral designs were used according to the quality of fabric and technique of production of clothes. These natural objects are shown symmetrically. If leaves and flowers of the plant do not balance properly, other elements are added to

¹ Zebrowski Mark; "The Hindu and Muslim Elements Of Mughal Art with Reference to Textiles" in Krishna Reboud (ed), *In Quest of Themes and Skills-Asian Textiles*, Bombay, 1989, p.26.

² Grube, E. *The World of Islam*, London, 1966, p.12.

³ Zebrowski Mark, Op.Cit.p.26.

⁴ Krishna Vijaya :*Flowers in Indian Textile Designs* cited from *Journal of Indian Textile History* vol.7, Ahmedabad, 1997, p.1.

⁵ Ibid.

⁶ Ibid.

gain symmetry.⁷ Overall patterns were used on fabrics consisting of many types of flowers. These overall patterns usually cover the entire fabric which change the quality of the fabrics and makes it attractive.

The flowers generally used in Mughal textile designs were taken from Persian carpet motifs.⁸ These motifs were used in costumes, architecture, jewellery simultaneously. Under the Mughals craftsmen of the seventeenth century copied some Persian forms and they used crocus from Persia and iris from Kashmir in their designs. But this adaptation did not prove satisfactory then they began to copy the whole plant on the carpets, costume, borders of shawls and sashes.⁹

In comparison to the larger floral motifs emphasis was given over the smaller motifs to complete the work quickly. Though larger motifs were showing greater details.¹⁰ The simplest floral motif was a small circle or dot with short radiating lines in all sides. It represents the flower of *Manhri* or *Bakula* (Mimmopselengi). But the actual form of flower with well-defined petals.¹¹

Design is an important device to make the textiles more beautiful and attractive. These designs not only show different patterns and styles but also the interest and the moods of different weavers and their patrons like the great Mughal rulers like Akbar, Jahangir and Shah Jahan.

Motif is an element of pattern, image, or part of one, or more themes. Motif can be an idea. Motifs include lines in various forms, such as vertical, horizontal, diagonal and curved.¹² Motif means a design that consists of recurring shapes or colours, theme that elaborated on in a piece of unifying idea that is a recurrent element in a literary or artistic work. It can be called as decorative art.¹³ In the Textile Arts, a Motif is a smaller element in a much larger work. Motifs are made one at Time and Joined together to create larger work. A good example of a Motif is the grandly square. Motif may be varied or rotated for contrast and variety or to create new shapes.¹⁴

⁷ Ibid.,p.2

⁸ Ibid.

⁹ Ibid.p.4

¹⁰ Ibid.p.4

¹¹ Ibid.p.3

¹² Textile Designing, State Council of Educational Research and Training, New Delhi, 2013, p.41

¹³ Ibid.

¹⁴ Ibid.

Motifs can be of any size but usually all the motifs in any given work are of same size.¹⁵ A design starts with a motif. When a motif is repeated at certain intervals over a surface it is called a pattern. Repetition of this pattern creates a design. Certain principals are used when repeating design.¹⁶

Motif plays a very important role in designing. It is used by the designers to express their ideas. A good designer should always be well informed about art, and current events. It is the designer's responsibility to translate the stylist concept, with the help of reference material.¹⁷

Classification of Motifs under the Mughals:

The motifs or units of a textile design may be classified as

- Geometrical
- Realistic or Natural
- Stylized
- Abstract

Geometrical Motifs:

Design and motifs created by using various geometrical shapes, such as lines, circle, squares, rectangle, triangle etc. are called geometrical motifs. It is possible to draw many man-made objects using geometrical shapes. Geometrical motifs are totally can be made more attractive with the use of colour and with the combination of various shapes.¹⁸ Earlier Indian designs were consisted of floral, bird and animal patterns but during the Mughal period the floral designs used with geometrical patterns gained prominence.¹⁹ But the geometrical designs on costumes were less preferred in comparison to the floral designs. These geometrical designs gained prominence only during the period of early Mughal rulers or up to the age of Akbar. (pl. 21) (plate 21 illustrates young Akbar wearing a *jama* designed with geometrical patterns, and almost all the people surrounding him are wearing the costumes designed with geometrical patterns). This reflects that during the reign of Akbar there was the dominance of geometrical patterns. The reason behind this may be that the reign of Akbar was age of consolidation of Mughal empire, which provided a little

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid, p.42

¹⁹ Trannum Fatima Lari ,*Textiles of Benaras Yesterday and Today*, Varanasi, 2010, p. 86

time to Akbar for the innovations in the field of costumes and designs. Though the geometrical designs were not strictly followed but it was a dominant character.

Natural or Realistic Motifs:

As the name suggests, these are the motifs inspired from nature. Patterns in nature change all the times, different seasons unfold different colours and scenes. Man is inspired by all that happening around him. We can see beautiful flowers leaves, vines, birds and animals embroidered on different garments very close to natural designs and motifs. Thus the pattern in naturalized motifs will be very close to nature.²⁰ With the advent of Mughals the old motifs like animal, bird and human figures were replaced by the floral ones, though the motifs of animals and birds continued to some extent.²¹ Realistic representation of flowers and plants are often classed as botanical.²²

The Mughal emperors Babur and Humayun were the great nature lover, and therefore they preferred the floral motifs. Though we can find some miniatures in which the Mughals were wearing the costumes patterned with animal figures During the reign of early Mughals probably during Akbar and Jahangir the animal patterns were used on large scale in costumes and textiles.²³ Among the animal figures, the most popular were tiger, *cheeta*, and elephant, known as *gaja-simha*, in Indian mythology. Among birds the most common is *simurg*, a mythological bird of the Persian epic, which is perhaps equivalent to the Indian *Garuda*²⁴, vehicle of Vishnu.(pl.22) (In this miniature a prince is shown wearing a *jama* embellished with animal figures and holding a falcon in his hand).

Abul Fazl describes Akbar as a lover of flowers, fruits and plants.²⁵ Consequently, during the Mughal period the Indian flora and fauna were depicted in Persian style. However during Akbar's time we find a greater admixture of indigenous and foreign culture. His age was the beginning of the development of floral motifs, and these appeared only bold and half-blooming floral designs. In the

²⁰ Textile Designing 2013, Op.cit.,p.42

²¹ Krishna, Anand and Krishna, Vijay, *Banaras Brocades*, New Delhi, 1966, 26.

²² Wilson Jacquie, *Handbook of Textile Designs Principle, processes and Practice*, 2001, England, p. 112.

²³ Daniel, S. Walker *Flowers Underfoot: Indian Carpet of the Mughal Era*, New York,1997, p. 33.

²⁴ Coomaraswamy, A.K.; *Mughal Painting*, Part 6 of Catalogue of the Indian Collection in the Museum of fine Arts, Boston, Cambridge, Mass, 1923, pp. 90-93.

²⁵ Abul Fazl, *Ain-i-Akbari*, Vol. I, tr. H. Blochmann, Delhi, 2011,(reprint), p. 81-93.

textiles of Akbar's era we find mainly the designs of flower buds with straight leaves and stems, whereas Jahangir's reign exhibits fully bloomed flowers with tender and flexible stems with curved and twisted leaves.²⁶ Robert Skelton is right when he speaks of the flowering plant "naturalistic in appearance, yet formally posed and arranged at different intervals against a plain background" as being "the Mughal decorative motif per excellence."²⁷

The textiles with patterns of scrolling vines and animals belong mainly to the reign of Jahangir. A higher state of finishing and refinement and the naturalistic representation and insight into personality was the hall-mark of Jahangir's reign²⁸ During the time of Jahangir, decorative arts passed through the different phases: (i) early decorative scheme, (ii) his return from the second visit to Kashmir in 1620 and his enchantment by the natural beauty of flowers.²⁹

When Jahangir visited to Kashmir in the spring of 1620A.D, he was highly influenced by the floral beauty of the valley and most likely introduced it in Mughal art. On the other hand Mughal art was highly influenced by the engraved European herbal books. The borders of the classical prints of these books consisted of the flowering plants, some even with butterflies and inserts. The most famous Mughal motifs, i.e., iris and narcissus flowers were frequently used in these borders with tulips, red roses and lilies. Mansur the famous court painter of emperor Jahangir was ordered to copy the flowers of Kashmir valley in the style of these herbal illustrations.³⁰

Jahangir's empress Nur Jahan also contributed to the development of decorative motifs. That's why his period was famous for the development of a multitude of artistic motifs. During the reign of Jahangir Mansur was a famous painter of nature, who was sent to Kashmir, where Mansur painted more than a hundred varieties of flowers.³¹ During the period 1620 to 1670 a number of botanical paintings of Mansur were successfully transformed into textile designs. Kashmir Shawls were the main garments on which floral motifs were used extensively. The most famous

²⁶ Trannum Fatima Lari , Op.cit.p.8.

²⁷ Skelton, R. , *A Decorative Motif in Mughal Art*", in Pal Pratapaditya (ed), *Aspects of Indian Art*, Leiden, 1972, pp 147-152.

²⁸ Coomaraswamy, *Mughal Painting*, Op. cit. p. 45.

²⁹ *Tuzuk-i-jahangiri*, tr. A. Roger and H. Beveridge, London, 1909-1914, vol. I, p. 96.

³⁰ Ibid. vol. 2, pp.143-145.

³¹ Ibid. vol. 2, p. 145.

Kashmiri floral design was the cylindrical floral motifs with roots which were combined with the grace and delicacy of Persian floral ornaments with the naturalistic characteristic of the Mughal art.

Stylized Motifs:

These are made to make the motif more beautiful. The motifs loses its natural form as it becomes more decorative and stylized. Thus the motifs which have more curves and details are away from their natural form and look more complicated such motifs are called stylized motifs.³² During the Mughal period, reign of Shahjahan is marked by the predominance of stylized motifs. This period in the Mughal history is marked by the zenith of textile designs. The naturalistic art of *Jahangir's* court was replaced by an extensive use of stylized art.³³

Different type of flowers such as *narcissi*, *rose*, *poppy*, *tulip*, *marigold*, *jasmine* and *champa* were used in a highly stylized way. Shah Jahan was a great lover of architecture, and the gardens. Alike the *chaharbagh* patterns: the plot divided into four parts, the shawls and *odhanis* were also decorated with the scheme of squares of four different colours.³⁴

There was extensive use of gold and silver during the reign of Shahjahan which is well seen in the paintings of his reign. The *patkas* of Shahjahan's reign were generally made with 'double layer' weaving technique which facilitated the decoration of ending panels.³⁵ The development of textile designs during the reign of Shah Jahan was the result of his keen interest in the development of decorative art. The arrangement of motifs became intricate during the reign of Shah Jahan.

Abstract Motifs:

These motifs does not have any specific inspiration. Both natural and abstract motifs used the same source of inspiration but results would be quite different. The natural motifs of a leaf will look like a leaf but an abstract motif of the same can be created by only using its texture, veins, patterns or colour to produce an attractive motif. These are also called non-figurative design.³⁶

³² Textile Designing,, 2013, Op. cit., p.42.

³³ Welch, Stuart Cary: *The Art of Mughal India*, New York, 1963, p. 67.

³⁴ Agarwal, Yashodhara, *Silk Brocades*, New Delhi, 2004, p.107.

³⁵ Ibid., p.105.

³⁶ Textile Designing, 2013, op. cit. p.43.

Types of Layouts :

Layout in a pattern is described as the arrangement of the motif, whether it is spaced widely or closely on the ground.³⁷

Unlike a painting or drawing, which is designed in relation to its boundaries or edges, the elements in a textile design are designed in relation only to each other. There are no boundaries; when the pattern is printed, it will continue over yards and yards of cloth. For a textile design to be reproduced on fabric, it must eventually be developed into one standard unit containing a specific arrangement of the desired motifs. This one unit, called a repeat, will be repeated across the width and length of the fabric in a continuous manner. Designs are sometimes done in repeat from the start but are often designed in balance and put in repeat later.

The patterns or layouts can be made in various ways to form the design, they are;

- Side layout
- Border layout
- All over layout

Side or Spot or Tossed Layout:

A pattern composed of motifs that do not recur at regular, measured intervals within one repeat unit of the design is referred to as a tossed pattern. The motifs in this layout are placed close to touch each other, but are separated by ground area, seeming to float on a plain background. This pattern can be constructed as a repeat of motifs side by side giving a side layout³⁸. (**pl 23**) (the plate 23 exhibits the court scene of the reign of Shahjahan, where almost all the courtiers are wearing *jamās* designed with all over floral *buti* spot design, this can be called an overall spot design with floral *buti* motifs.)

Border Layout:

Most border designs are composed of a unit or series of units or lines repeated at intervals over the given area. The design used is one, which permits the eye to travel its length easily without interruption. Sometimes a design which does not seem to leave the eye easily over its length would be very successful if the units used are brought together closely. The rhythmic effect is achieved through the use of an

³⁷ Wilson, op. cit. , p.113.

³⁸ Ibid., p.114.

unbroken line running the length of the border. Even if the lines are broken, it should be done at regular intervals, so that the eye automatically bridges the gap and sees it as a continuous line.

All-over Layout:

It has balanced motifs that recur irregularly within the repeat unit. The motifs are connected in some way, forming a network that covers the entire design plan. This is also called a meander. These designs feature elaborate, embellished floral-like motifs that seem to grow and wander across the design plan.³⁹

A pattern in which all motifs repeat directly under and directly across from one another at measured intervals is called a set or tailored pattern. Small patterns of this type with organic shapes in all-over layout are also called foulards.⁴⁰ **Pl. 24** (This illustration exhibits a Jahangir in an allover designed *jama* while killing a Lioness, it is an allover floral vines patterned *jama*.)

Maturation of Textile Designs During the Reign of Shahjahan:

During the reign of *Shahjahan* these floral motifs were arranged in a more delicate manner with high ornamentation of *zari* wire. Plants, foliage, sprays, blossoms and floral scroll all began to be presented in a more delicate manner. Above all distinctive feature of the floral designs of Mughals led to the development of Mughal school of art, which contributed a lot to the evolvement of brocade fabric of Banaras. (**pl. 25**) In plate 25 there is a gold brocaded *patka* with red colour base and Chinese clouds patterns, the border of this *patka* is decorated with floral plants surrounded by small borders of scrolling vines and at the ends are embellished with a golden lace. Its border is decorated with single plant motifs. (**pl. 26**) In plate number 26 there is another brocaded *patka* with some ribbon like patterns on its borders, here the floral patterns take the shape of the ribbons. These are made on a base of gold thread on which these green coloured floral patterns are made probably with silk wire. Except borders the main part of *patka* is embellished with an alternate arrangement of the plain pink coloured strip and the scrolling vines pattern.

³⁹ Ibid., p.114.

⁴⁰ Ibid., p.114.

For convenience all brocade designs may be classified as: (1) *Tasvir* or pictorial theme, (2) *phulwar*, a flower design, (3) *butidar*, springed design, (4) geometrical pattern, (5) *Shikargah* or hunting scene.

The pictures and portraits drawn by the weavers were called pictorial brocades or *tasvir*.⁴¹ Running patterns comprising flowers and leaves were called *bel*. A number of these patterns were in use i.e., *adibel*, *daubel*, *khajuribel*, *gendakibel*, *cane pattikabel*. It was called *phulwar*.⁴² *Buti* was a type of motif in which a single flower was made on the cloth. *Butis* were of different type. The word *buti* is derived from the latin word *butia* a composition of a shrub or flower into a pattern.⁴³ *Asharfi* pattern was also famous which was the imitation of *gul mohar*. In this motif the inner space of a circle was filled with floral motifs. Other were *keri* on green mango *buti*⁴⁴, the *chand tarabuti*, with moon and star. In this illustration of Shahjahan's court almost all courtiers are shown dressed in the costumes embellished with floral *butis* which suggests the predominance of floral *butis* during the reign of Shah Jahan.

Early Mughal motifs were bold, simple and there was an ample space between the motifs. Designs stood out prominently against the background. The combination of basic and additional decorative elements led to the development of complex patterns. During the reign of Shahjahan the gap between the motifs disappeared because an intervening space was filled with smaller motifs. Flowering plants motifs were dominated Mughal art, such motifs were not only employed in border decoration of the Mughal costumes but also on the surface decoration of the building, e.g., *pietra dura* work appeared in the buildings as the Taj Mahal, and the Red Fort.⁴⁵

During the reign of Shahjahan textile designs marked the zenith. The realistic art of *Jahangir's* court was replaced by an extensive use of stylized floral motifs.⁴⁶ In the words of Stuart Cary Welch, Mughal used 'a hypnotic arrangement of blossoms, which strikes a perfect balance between naturalism and abstraction.'⁴⁷

⁴¹ Anand Krishna and Vijay Krishna, op.cit., p. 80.

⁴² Ibid. p. 82.

⁴³ Ibid.

⁴⁴ Ibid., Plate 5A, 55.

⁴⁵ Swietochowski, Marie C., Welch S.C., Annemarie Schimmel and Wheeler M. Thackston: *The Emperor's Album*, Metropolitan Museum of Art, New York, 1987, p.45.

⁴⁶ Welch, *The Art of Mughal India*, Op. cit. p. 67.

⁴⁷ Ibid.

The designs of Aurangzeb's period were the repetitions of the motifs used during the reign of Shahjahan.⁴⁸ According to Welch, the designs famous during the reign of Shah Jahan lost its magnificence as it was the time of general decline.⁴⁹

Pre-eminence of Flowers and Flowering Plants as Design motifs under the Mughals:

The gardens of the Mughal court were filled with different types of flowers, and these flowers were spilled over into paintings and textiles. A number of gardens were established in India by the first Mughal emperor Babur. In his historical writings he gave a description of an apple tree in autumn and, spring flowers in the foothills of the Hindu Kush. One of the paintings of Akbar's reign illustrates Babur supervising the construction of an Iranian style garden.⁵⁰ Enriched the textiles of his period with extensive use of floral motifs, either it is costumes, carpets, and wall hangings.⁵¹

Floral motifs are of different types i.e. flowers, creepers, sprays, springs, plants etc. These floral form are used symmetrically in the textiles. To balance the plants with leaves and flowers other elements were added to them.

The Mughal textile designers borrowed these floral motifs from Persia and Kashmir like crocus and iris. But later on the whole plants were copied by the Indian weavers for example tobacco (**pl. 27**) plant (*Nicotiana tabacum*) was in great vogue.⁵² Because of the paucity of material on such an important topic like floral motifs very few literary accounts are available.⁵³ The *Ain-i-Akbari* deals with flowers and textiles, the memoirs and the other contemporary sources are silent on this matter.⁵⁴

Iris appeared an important floral motif at the Mughal court, and this motif was very popular in Mughal attires. It was borrowed from Persia and was famous for its beauty and fragrance. Their colours are a mixture of pale sky blue, purple, yellow and sometimes white.⁵⁵ The *crocus* (**pl. 28**) also belonged to the iris family. The saffron-crocus was very famous and has several varieties. Their colour were purple, lilac or

⁴⁸ Yashodhara Agarwal, Op. cit., p.107.

⁴⁹ Welch, *The Art of Mughal India*, Op. cit., p. 67.

⁵⁰ Guy John and Swallow; Deborah eds. *Arts of India; 1550-1900*, London: Victoria and Albert Museum, 1990, p.59.

⁵¹ Dusenbury Marry M, Bier Carol; *Flowers Dragon and Pine Trees, Asian Textiles in the Spencer Museum of Art*. Hudson Hills, New York, 2004, p. 20.

⁵² *Journal of Indian Textile History* op. cit. p.9.

⁵³ Ibid.

⁵⁴ *Ain-i-Akbari*, Vol.1, op.cit., pp, 91-92.

⁵⁵ *Journal of Indian Textile History*, op. cit., p. 4.

pale blue and even white colour.⁵⁶ The *saffron* has also played an important role in religion, medicine, as a dye stuff, as a flavour and as a perfume and from here its fame event to the west and it was frequently used under the Mughals and other regional textiles of Kashmir.

Tulip is another flower applied as a motif for textile decoration (**pl. 29**) This cup-shaped flowers have six regular segments in two rows. Its species are numerous.⁵⁷ Narcissus or *Nargis* (**pl. 30**) in Persian, is a beautiful flower it attracted the Indian textile designers.⁵⁸ It has the trumpet, or central portion and the perianth, which comprises the segments surrounding the trumpet. It was generally employed to embellish the shawls. The motif of Opium poppy was equally important in the Mughal decorative art. It is a white or blue purple flower and it was the native of temperate Asia that's why it is frequently used in the Mughal art. It was particularly used in the Mughal *shawls*.⁵⁹

Marigold (**pl. 31**) another important floral motif of Mughal art was originally from foreign origin.⁶⁰ It is a flower of lemon-yellow colour with green leaves. This was generally reproduced in brocades. *Bela* (*Jasminum sambae*) (**pl. 32**) is another important floral motif frequently used in brocades of the Mughal period.⁶¹ The floral pattern comprising *Chameli* (*Jasminum officinale*) was used in prints.⁶²

Chameli was an important floral motif in vogue in Mohammedan India. The Mughals adorned their garments with its pattern.⁶³ A flower known as *malhi* given in the *Ain-i Akbari* resembles with *chameli*.⁶⁴ The *Champa*, a conical shaped flower, about two inches long, with many long petals was the most popular motif used in Mughal brocades. It is of golden-yellow colour.

Lotus flower was another famous motif in the Mughal art. Its leaves are shield-shaped and bluish green colour (**pl. 33**). This illustration shows emperor Shah Jahan is wearing a fine muslin *jama* and a *churidar pajama* embellished with lotus motif of

⁵⁶ Ibid., p.5.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid, p.6.

⁶⁰ Ibid.

⁶¹ *Ain-i-Akbari* tr, vol.1, Op. cit.

⁶² *Ain-i-Akbari* tr., vol.1, Op. cit.

⁶³ Bhatnagar, Parul; *Decorative design History in Indian Textile and Costumes*, Chandigarh 2004,p.41

⁶⁴ *Ain-i-Akbari*, tr. Vol.1, Op. cit.

flowering plant lily. Lily flower is well known as the symbol of purity. The blue species of water lily is the native of Kashmir and Persia, and the yellow is the native of Egypt.

Rose, (pl.34) which is known as the *Queen of flowers*, and the symbol of love.⁶⁵ Some of the roses belonged to Persia other to Asia, Mediterranean region and south of Europe. It was very famous for the brocade designs of Indian textiles, and was also used in the printed designs. Jahangir in his Memoirs describes that he saw a flower of the redness of fire, of the shape of *gul-i-khatmi*, but it consists of a number of smaller and several flowers blooming together in one place, if we see them from a distance, they looked like one flower. Its stem is of the size of the apricot-tree. *Saffron* flower is finely depicted in the costumes of Mughal period. Jahangir says about it in his Memoirs that it has four petals, and its colour is that of the violet. Its size is like *Champa* flower.⁶⁶

A number of floral motifs were used to decorate textiles during the Mughal. The first is the *Champa* (*Michelia champaca*) (pl. 35), which is a flower of exceedingly sweet fragrance; it has a shape of the saffron flower, but is yellow inclining to white. The tree is very symmetrical and big. It consists of a number of branches and leaves. *Ketki* is another flower, which is yellowish. *Chambeli* was another important one.⁶⁷

Therefore during the Mughal period floral designs were used on a large scale in almost all media either it is textile or architecture. As the reign of Akbar was a time of consolidation therefore we find some simplicity in the costumes of his reign, here the designs were not used on a large scale in comparison to his successors. The solidity which was provided by Akbar to Mughal Empire facilitated his successors, which paved the way for the innovation in almost all the fields and provided a plenty of time to the emperors to utilise their potentials. This is the reason that Jahangir took great interest in the development of artistic styles, as mentioned above that he ordered Mansur the famous court painter of his reign to paint some rare flowers. Though animal motifs were also used during his reign. Similarly during the reign of Shah Jahan we find the extensive ornamentation in both architecture and textiles. But there was a predominance of floral motifs during his reign, a high quality of floral

⁶⁵ *Tuzuk-i- Jahangiri*, Op. cit., vol.2, p. 124.

⁶⁶ *Ibid.*, p. 177.

⁶⁷ *Tuzuk*, vol. 1, p. 6.

ornamentation combined with gold and silver work was used. All this was continued during the reign of Aurangzeb though it got a setback because of some political disturbance caused by war of succession.

Aesthetic of Mughal Textile Designs:

Babur, his son Humayun and his grandson Akbar were the great patrons of art and were keenly interested in intellectual matters and they maintained contact with the Iranian court and invited the Iranian artists and craftsmen to India, which led to the development of the style combined with the naturalism of pre-Islamic India and the formalism, grace and delicacy of the Islamic Iranian style floral motifs was an important style of textile design.

In the beginning of the reign of Akbar we find the influence of European artistic style on the style of the Mughal court, he also provided opportunities to the court craftsmen to study European artistic ideas and skills. Akbar welcomed the European travellers to the court and obtained paintings, textiles and other artefacts' that travellers brought by the travellers with them. Dutch botanical gardens highly influenced the flowers in Mughal paintings, textiles and other media.⁶⁸

Jahangir, the great grandson of Babur was a keen observer of natural world. The best artist working under Jahangir was Mansur, who was famous for the paintings combined with the elegance of Iranian style.⁶⁹ According to Robert Skelton Mansur was the artist who developed the Mughal style flowering plant motifs. Which were extensively used in the Mughal courtyards. Skelton said that there were two factors that led to the emergence of floral motifs during Jahangir's reign. One was the influence of French herbal by Pierre Vallet that Jahangir received around circa 1618. The other was Jahangir's visit to Kashmir during which he ordered Mansur to paint one hundred of spring flowers in the foothills of Himalayas, the same flowers are described in the Memoirs of Babur many decades earlier.⁷⁰

The first generation of the Indian court costumes begins with the textiles woven under the patronage of the Mughal rulers Akbar (1556 to 1605) and Jahangir (1605-27). The designs attributed to the reigns of Akbar and Jahangir display a variety

⁶⁸ John Guy and Deborah Swallow; op. cit., p.79.

⁶⁹ Welch S.C. *India: Art and Culture, 1300-1900.*, New York Metropolitan Museum of Art, 1985, p. 169.

⁷⁰ Skelton, R, *A Decorative Motif in Mughal Art*, op. cit., pp. 145-152.

of patterns. For this the credit goes to all artistic fields, either it is literature or paintings and to the influx of Persian poets, calligraphers, and painters to the Muslim courts of the Mughals and Deccani Sultans. The reason behind this development of art was that the Mughal courts of India welcomed and encouraged the artists who had extra talents. This all resulted in the intermingling of the artistic styles of the Persian and Indian models.⁷¹

The designs on costumes can be seen in the forms of pictorial scenes taken from the book illustrations and the patterns consisting of scrolling vines and palmettes, sometimes symmetrical and sometimes overlaid with animals or a central medallion. Firstly, the book atelier developed the patterns of ornamentation, which were then used in all other media, including architecture.⁷²

Akbar's tomb at Sikandra near Agra, completed by his son Jahangir, contains wall paintings with symmetrical vines, palmettes and blossoms combined with both Persian and Indian motifs. But on Itimad-ud-Daula's tomb we find the most intricate designs, which consisting of the inlaid stones. On it the decoration is done with some flowers, patterns of vases, within niches, scrolling vines and blossoms, which are Persian in origin. This all was more or less similarly applied on costumes.⁷³

Under the Mughals the art was kept free from religion by the rulers. Heavenly gardens, trees and birds hunting scenes and figural motifs were woven into textiles. The rare textiles of Persia influenced the Mughal textiles. This influence is well seen in a rare *patka* of Jahangir's period lodged in the Bharat Kala Bhavan collection (**pl. 36**). Here the three long vine creepers intermingling with a variety of birds, flying or sitting parrots among, *simurgh* (a mythical Persian bird), and peacocks. Two human figures are shown sitting amidst the creeper, drinking from their vessels.

These animal, birds and human figures are also well depicted on the walls of the tomb of Itmad-ud-daulah, in Agra, built between A.D. 1622-1627. An introduction of these animals, human and birds motifs was not only due to the influence of Persian textile designs but the European pictorial engravings and tapestries also.

⁷¹ Daniel, S. Walker, op. cit., p. 29.

⁷² Ibid.

⁷³ Ibid., p. 32.

In the sixteenth century, Mughal designs drew heavily on south Asian and Persian designs. In India, forms from nature have been carved in stone and wood, and represented in other media for millennia.⁷⁴ Under the Mughals we find the predominance of naturalistic representation⁷⁵ . .

From Persian design came the taste for circuitous, interwoven arabesque spirals on carpets, textiles, and other artistic wares. Likewise, the idealized natural world of Persian manuscripts also influenced Mughal arts; each flower and blade of grass was painted with perfection, every petal abloom and positioned to please the viewer to the best of the artist's ability.

In the early seventeenth century, Mughal designs shifted away from idealized Persian floral motifs to naturalistic ones, most likely as a result of travelling European merchants, emissaries, and Jesuit missionaries. These visitors brought with them books, tapestries, and paintings which were of great curiosity to the Mughal court. In particular, botanical books featuring highly detailed, block-printed images of plants are thought to have intrigued Mughal artists. The naturalism articulated in the European botanical studies were adapted by Mughal designers to suit local tastes, and from this blending of cultures a brilliant artistic tradition developed.⁷⁶

The Mughals introduced a change in textile surface ornamentation and designs. Their appeared multi-coloured designs combined with gold and silver thread. The patterns of these textile designs took inspiration from the Mughal court paintings. The geometrical and floral motifs of the *hashiya* (border) of these paintings were the main source for the textile designs.

Weavers from different countries were given the patronage under the Mughals which led to the intermingling of the different techniques for example cylindrical *buta* was the result of the intermingling of the Persian and Indian designs.⁷⁷ (pls. 37, 38). In plate no.37 A *Patka* is decorated with cylindrical type floral patterns are made on a light greyish blue base and where the flowers are yellow and the leaves dark greyish blue colour, the border surrounding the patterns comprising scrolling vines.

⁷⁴ Schuster, Michael, "*Field of Flowers: Mughal Carpets and Treasures*" (2008). Textile Society of America Symposium Proceedings. Paper. 262. <http://digitalcommons.unl.edu/tsaconf/262>

⁷⁵ Trannum Fatima Lari , op. cit. p.87.

⁷⁶ Schuster, Michael, op. cit.

⁷⁷ Irwin, John, *The Kashmir Shawls*, London, 1973, p.11

Whereas in plate no.38 a cylindrical shaped plant motifs are shown with pale yellow rain drops on flowers, where the white rain drops seems pale in sun light).

The Mughal designs were highly influenced by the Persian brocades. This was possible because of the healthy relationship between the Mughals and Persia. During his exile Humayun went to court of Shah Tahmasp of Persia (A.D. 1524-1576). Later on when Humayun reestablished his empire, he patronized two Persian masters, Mir Sayyad Ali and Abdus Samad. They laid the foundation of the Mughal paintings.

There was a tradition of exchange of envoys between the Mughal and the Persian court. They exchanged the precious gifts too. The most famous presents were the brocades of Persia. We find the similarity between the Mughals and the Persian brocades. Though the Mughals copied Persian brocades but no one can make difference between them. The designs of the Mughal court were more realistic and less decorative in comparison to the Persian court.⁷⁸ The large but with a single flowering plant became very famous during the Mughal period, it was particularly used for the borders of Shawls. In these *butas* a single flowering plant with roots is shown in a cylindrical form. (pl. 39, 40) Both the plates exhibit cylindrical type of *buta* designs. It is combined with the grace and delicacy of Persian floral ornament with the naturalistic characteristic of 17th century Mughal Art.⁷⁹

According to *Hadis*⁸⁰ the depiction of animals, birds and human figures was prohibited in Islamic art. The pre-Muslim Persian and Sassanid textiles were decorated with birds and human figures which were replaced during the Muslim Persian court. This was again revived in A.D. 1499 under the Saffiddian dynasty. The art of the Safiddian period reached its zenith under Shah Abbas (A.D. 1586-1625).

The markers and the designers used to draw their designs or *naksha* on paper on the basis of the patterns and designs which were in vogue in the market. The *Nakshaband* modify the existing design patterns according to the need of their customers. The outlined pattern made by the designers passed to the designers or *Nakshband*. The markers outlined the patterns onto the cloth with pencil and black ink. Sometimes they also use the water colours to show the colour pallet. The

⁷⁸ Yashodhara Agarwal, op. cit., p .96.

⁷⁹ Irwin, John, *The Kashmir Shawls*, op. cit., p.11.

⁸⁰ The Islamic Book containing rules of conduct.

embroiderers' task was more artistic and important than the marker.⁸¹ For fixing the bhant (design) according to the design plan. The warp is stretched on a small wooden frame and tied with cotton thread. Then design is executed onto the paper. This is called the design plan or *jaala*.⁸² The *Ain-i-Akbari* of Abul Fazl gives us the information about the *Nakshband*. It gives the reference of a number of foreign designers, who visited the royal factories of the Emperor Akbar in Lahore, Fatehpur Sikri and Ahmedabad. The foreign designers were invited to train the local weavers, craftsman and designers. One famous designer was the Gias from 'yazd'. He was the best weaver of his time all over the world.⁸³

Zardozi Embroidery:

Zardozi is a type of embroidery done with metallic thread, originally silver thread and silver coated with pure gold and silver and other light – reflective elements such as coiled wires and metallic discs. *Zardozi* – worked textiles were the priority of the privileged or the royal and the courtly people, for weddings and for other religious ceremonies.

According to some historians *zardozi* embroidery came from the Ottoman empire but others maintain that it is an indigenous craft. However, it has been assumed that the chain stitch or tambour technique which is the basic stitch of most of Indian *zardozi* work, was an Indian invention.⁸⁴ *Zardozi* embroidery was done both on the borders and sleeves and on other clothes like scarves, skirts, trousers and jumpers. The expert artisans from the royal factories were also visiting Banaras along with Mughal royalty.⁸⁵

The evidence of the earliest embroidered clothes for lower garments of men and women of high social status is found in historical texts. These embroideries were possibly in gold and studded with precious stones. The embroidery with gold and silver became very popular during the medieval period which continued to the modern age. Ibn Batuta in his writings has mentioned that Sultan Mohammad Shah granted

⁸¹ Trannum Fatima Lari ,op. cit., p.77

⁸² Ibid.78

Abu-al-Fazl, *Ain-i-Akbari*, tr. By H. Blochmann and Col. H.S. Jarret, vol. 1, Calcutta, 1927-49. S. v. *Handwoven Fabrics of India* ed. By Jasleen Dhameeja and Jyotindra Jain, 1989.p.56.

⁸⁴ Kumar Ritu ,*Costumes and Textiles of Royal India*, London, 1999, p.42

⁸⁵ Trannum Fatima Lari , op. cit.2010, p.53.

Nasir-ud-din a gilded robe of black *abfasi* colour embedded with precious stones together with a turban to match the robe.⁸⁶

During Mughal period, among the elite class there was a tradition of wearing attractive garments, embellished with a great varieties of designs and embroidered work. The fact lies that this craft flourished under the Mughals and reached its apex.

It is well proved from the Mughal sources that the Mughal rulers provided the better opportunities to develop the art of embroidery by appointing the skilled artisans from Persia.⁸⁷ Abul Fazl who writes, " His majesty pays much attention to various stuffs, hence ' Irani', ' European' and Mongolian articles of wear are in abundance. Skilful masters and workmen have settled in this country to teach the people an improved system of manufacture. The imperial workshops in the towns of Lahore, Agra, Fatehpur, Ahmedabad, turn out many masterpieces of workmanship and the figures and patterns, knots and variety of fashions which now prevail, astonish experienced travellers. His majesty himself acquired in a short time a theoretical and practical knowledge of the whole trade, and on account of the care bestowed upon them, the intelligent workmen of this country soon improved. All kinds of hair weaving and silk spinning were brought to perfection and the imperial workshops furnish all those stuffs which are made in other countries."⁸⁸

During this period native designs were highly influenced by the Mughals.⁸⁹ In sixteenth century we find the highly fashioned goods not only for the royal use but to export also. This shows that the Indian embroidered clothes were exported to England through Portugal.⁹⁰ Francois Bernier gives the account of beautiful embroidery done on the ladies trousers called '*pajiamas*'.⁹¹ Bernier has also made implicit comparison between the situations prevailing in France and in India, particularly in Delhi. He states that the articles produced by these *karkhanas* were of very high quality and considered to be excellent pieces of art.⁹²

⁸⁶ Battuta Ibn , *Rehla* , tr.by Mehdi Hasan,Baroda,1956, p. 48.

⁸⁷ *Ain*, Blochman, op.cit.p.93-94

⁸⁸ Ibid.

⁸⁹ Jagdish Mittal and Kamala Mittal: *Bhartiya kasida*, (Indian Textile) Hyderabad, 1954, p-9.

⁹⁰ Ibid., p-10.

⁹¹ Bernier, Francois, *Travels in the Mughal Empire* (1656-1668 AD), ed. A. Constable, Oxford, 1934, S.v. Verma, Harishchandra; *Madhyakalin Bharat*, part-2, (1540-1761), 1993, Delhi, p.305.

⁹² Bernier, Francois, *Travels in the Mughal Empire* (1656-1668 AD), ed. A. Constable, 1891, reprint, Oxford, 1934 ,p.254

During the Mughal period court dancers were also wearing turbans with intricate embroidery. This intricate embroidery could be easily seen from the fine transparent clothing. The gold and silver embroidery was done on these cloths.

The royal patronage provided by the Mughals to the *zari* industry led to the development of this industry in India. The foreign travellers came during the Mughals gives us the references of the development of *zari* industry in India as mentioned above. The Mughal rulers were very much fond of wearing the *zari* made clothes. The Mughal emperors played an important role in the development of *Karchobi* art in Banaras. Except Aurangzeb, all members of Mughal royal family were wearing the embroidered clothes.

The information regarding the organization and functioning of the court *karkhanas* is found in the travel accounts of the Frenchman Bernier, who visited the court of emperor Aurangzeb at Delhi and left a vivid description of the imperial workshops of the time. Bernier described the *karkhanas* as 'large halls' where different crafts including embroidery work were done. These were the royal production workshops. Bernier writes, 'In one of these halls you see the embroiderers occupied in their work with the master who supervises them.'⁹³

The word *zardozi* is a combination of two urdu words 'zar' means gold and 'doz' means hand-work; *zardozi* is done with a gold thread hand-crafts, *zardozi* is a costly work. During the Mughal period the costume with *zari* embroidery were much in fashion. The royalty and nobility gave priority to the costumes with gold and silver embroidery. The treasure of Akbar included wide range of stitched garments, which were embellished with metal embroidery.⁹⁴ *Shawls* were embellished with gold and silver thread in the early Mughal period. However, there are no extant examples illustrating the presence of such shawls prior to the late eighteenth century.

Bernier while describing Shahjahan's appearance in the court in his accounts wrote, "the king appeared seated upon his throne at the end of the great hall in the most magnificent attire, which was off-white and delicately flowered satin with a silk and gold embroidery of fine texture" He also mentions other stuffs stripped with gold and silver and also turbans embroidered with gold.⁹⁵

⁹³ Bernier, op. cit. , p. 259

⁹⁴ Smith, V.A., '*Treasure of Akbar*', *JRAS*, 1915, pp. 231-242.

⁹⁵ Bernier, op. cit p.254.

Although Mughal floral ornamentation emerged as an art form in Akbar's reign. It received fresh impetus under *Shahajahan*. Royal robes decorated with all over floral designs were the height of fashion and it is likely that the motives were outlined in gold thread and may even similar to the *pietra-dura* inlay work of marble monuments, or the fine *minakari* (enamelled) jewellery worn by royalty⁹⁶

In women's costumes, it is observed that there was more emphasis on adorning the lower garments such as *lehnga*, *sharara*, *garara*, *ghaghra*. These garments provided vast span for the embroiderers to show their skills. The work profusely remained in the *kamdani* style.⁹⁷

Various texts of nineteenth century mentioned different types of dresses embroidered with *zardozi* work. As regards the nature of embroidery on dress and costumes, the work is reported to have been of fine variety of *karchikan* for female costumes whereas the *karchobi* for male costumes. The distinction in the fineness of embroidery for women and men perhaps characterised the delicacy and roughness in two sexes.

It appears that Rajput ladies wore *Angiya* or tight fitting bodice. It was half-sleeved or full-sleeved. Below the *Angiya*, *Lahanga* (long skirt) was worn. *Odhuni* was used for covering the upper part of the body and head. The cloth used in *Lahanga* was generally printed. The bottom was embroidered with pearls and *zari*.

The fabrics materials on which *zardozi* was done during the Mughal period included *mashru*, *silk*, *muslin*, *velvet brocade*, *bafta*, *amru,ghatta* or *satinette-like velvet*.⁹⁸ Although embroiderers continue to use silver wire, the main feature of the gold wire drawing industry has undergone various changes. The industry reached its zenith during the Mughal period, patronised by the emperors and Maharajas of the provincial courts.⁹⁹ For the history of the techniques in chronological sequence, we are to depend on the contemporary records. We come to know that during the heyday of the craft gold and silver tinsel were available in Lahore, Delhi Agra, Benaras, Murshidabad, Ahmedabad and Burhanpur and Ahmadnagar.¹⁰⁰ As a matter of fact all large towns, which were the seat of Muslim culture and administration were noted for

⁹⁶ Ritu Kumar, Op. cit. ,p. 42.

⁹⁷ Gupta Charu Smita, Zardozi; *Glittering Gold Embroidery*, Delhi, 1996, p. 64.

⁹⁸ Watt George: *Indian Art at Delhi*, London,1903, pp. 297-299, 319.

⁹⁹ Hunter W.W.: "*Embroidery Gold and Silver thread wire, tinsel etc.*", IGI, vol. 6,1886, pp. 602-603.

¹⁰⁰ Mukherji, T.N., *Art Manufacture of India*, 1888, p.368.

the manufacture of such wire. This lent an exorbitant variety of gold and silver tinsel material to be employed on *zardozi* embroidery.

The manufacture of *zari* conveniently divided into several stages. The first stage *potai* or *pavthan*, which involves bar-making and wire drawing. The bars are called *pasa*. In the next process *tarkashi* or *tania*, the wire is drawn series of plates where in the final stage, diamonds or rubby dies are used. Apart from this *salma*, *kora*, *dabka*, *chikna*, *gizai*, *zik*, *chalak*, *tikora*, *kangri*, *champo*, *kinari*, *khichcha* are some of the other varieties of gold decorations used to accompany *zari*, especially in *zardozi* embroidery.

The traditional system of production for these crafts was the organizational set-up of *karkhana*. Many court crafts disintegrated and perished but the production organization of the *zardozi* craft sought suitable adaptation; in the changing environment emerged new production organizations.

Thus it is concluded that either it is embroidery, use of floral motifs, animal motifs or any other type of decoration the Mughal rule was a hall mark in Indian history. They not only patronized different art forms at the Mughal court but they themselves were very keenly interested in development of these arts. Which is clearly reflected in the architecture, textiles either it is costumes or carpets, tents, wall hangings etc. The harmonic combination of naturalism, and the unnatural, the authentic, and the affected, was difficult to achieve in any time but was made possible during the Mughal rule. In many respect the height at which the Mughal decorative arts were seen took countless generation to achieve it.

CHAPTER - 3

NATURE AND NURTURE OF FABRICS DURING THE MUGHALS

Among all Indian handicrafts textiles formed a unique class. Continuous invasions, migrations and many ups and downs instead of destroying the things led to a synthesis among different cultures which led to the emergence of new crafts in India. Textiles stand in an unambiguous position between art and crafts. Earlier they were included among crafts but the recent textile experts and art historians placed this precious heritage in the category of art.¹ It is difficult to say when threads were passed through the shuttle. There is a long history behind it.² When we talk about the textile fabrics of Mughal period, under the Mughal rulers this art witnessed a new efflorescence. Under the Mughals Gold and Silver Brocades, fine figured *muslins*, printed and painted fabrics, intricate embroideries begun to be manufactured on a large scale. Both Akbar and Jahangir took a great interest in the development of textile art.³ Which reached its apex during the reign of Shah Jahan and continued for decades.

Silk Fabric:

The silk produced in western India was mostly the fabrics mixed with cotton and silk. The only true silk was *patolas*, which were also known as double Ikat of Gujarat. The main weaving center of *patola* was Patan. These *patolas* were not only used for the home market but much in demand in Europe also.⁴ Another fabric of true silk which was less in demand in comparison to *patolas* was '*culgars*'. This was printed silk.⁵ *Patola* is a historical fabric. It is well known for its delicacy considered as one of the most gorgeous fabrics. Ahmedabad was also a famous silk producing center from here *patolas* were exported to south-east Asia.⁶

The *patolas* were silken stuffs, very soft, decorated all over with flowers of various hues.⁷ Barbosa tells us about the coloured cloths and silks which is called by Indians as '*patolas*' particularly the Cambay silk stuffs were called as '*patolas*'.⁸ The

¹ Rustam J. Mehta, *Masterpieces of Indian Textiles*, Bombay, 1970, p.1.

² Das, Sukla, *Fabric Art and Heritage of India*, 1992, Delhi, p.2.

³ V.S. Agrawala, *The Heritage of Indian Art*, Bombay, 1964, p.37.

⁴ *The English factories in India*, 1934-6, ed. by W. Foster, Oxford, 1906, p. 102.

⁵ Irwin John and Schwartz J P.R. *Studies in Indo-European Textile History*, Calico Museum of Textile, Ahmedabad, 1966, p. 23.

⁶ Tavernier, Jean Baptiste, *Travels in India*, tr. by V. Ball and ed. by W. Crooke, London, 1925 vol. 2, p.2.

⁷ Ibid. vol. 2, p.3.

⁸ Barbosa, Durate, *The book of Durate Barbosa*, tr. L.M. Dames, London, 1992-93, p. 185.

word *patola* is derived from the Kanarose ‘Pattuda’, ‘a silk cloth’.⁹ Terry calls the *patolas* as ‘Pintadoes’.

Among mixed fabrics one important was ‘*alachas*’.¹⁰ They were striped fabric. Some of these fabrics were mixed with linen and silk instead of cotton and silk. The other mixed cotton and silk fabrics were ‘*cuttanee*’. Pattern was somewhat similar to *alachas*. The other cheapest mixed fabrics were *tapseila*. A different kind of mixed fabric was the ‘*camboolees*’ of Sind. Bengal was the main center for the production of both raw silk and finished silk piece-goods, during seventeenth century.¹¹ Though Bengal silk products were not so fine in comparison to those of Persia, Syria, but they were much costly.¹² The Persian term used for Bengal silk is ‘*tafta*’, which is known as ‘taffeta’ or ‘taffatie’ in English.¹³ Most Bengal ‘taffaties’ came from the area around Kasimbazar and Malda. Some of them were pure silk and some were mixed with cotton. Besides Malda and Kasimbazar area, Bengal also produced fabrics of mixed *Tassar* silk and cotton commonly known as ‘herba goods’.

The most famous textiles which were in use during the Mughal period were the velvets, brocades, metal base clothes and woven silks, mixed with other fibres mainly with cotton. The main silk producing centres during the Mughal period were – Ahmedabad, Surat, Sindh, Delhi, Agra, Kasimbazar and Malda. According to Tavernier the main silk producing center during the 17th century was Kasimbazar and some other areas of Bengal.¹⁴ Bernier also confirms the account of Tavernier that during Mughal period Bengal was the main silk producing centre from where silk was exported not only to the other part of India but to foreign countries also.¹⁵

During the Mughal period silk with various gold and silver ground was very famous. The garments made with silk were very gorgeous. These gorgeous textiles made with glittering metallic treads were usually patterned with flowering plants arranged in various combinations.

⁹ Tavernier, vol.2, op. cit. p.3.

¹⁰ Irwin John and Schwartz J P.R. op. cit. p. 23.

¹¹ Irwin John and Schwartz J P.R. op. cit, p. 24.

¹² Ibid. p. 46.

¹³ Bernier, F. , *Travels in the Mughal Empire*, trans by A. Constable, Oxford, 1934, vol.1, pp. 439-40.

¹⁴ Tavernier, vol. 2, op. cit. p 2.

¹⁵ Bernier, vol.1, op. cit. p. 439.

The silk woven with metallic thread was produced in western India¹⁶, mainly at Ahmedabad, where the imperial *karkhanas* were located. Several seventeenth century Indian silken fabrics were made not only of silk but also of silk combined with other fibres, usually cotton. One of the most famous of these was – “*alacha*”, which was produced in Cambay in Gujarat region.¹⁷ Except the simple stripes of blue, white and red colour, this silk-cotton textile was sometimes flowered or woven with gold and silver thread. Bernier describes ‘*alachas*’ as silken stuffs made with gold and silver¹⁸, possibly the striped garments of Shah Jahan’s reign were mainly ‘*alachas*’, i.e., trousers.

***Taftas* :**

The *Tafta* is a Persian word which means ‘to twist’, ‘to spin’. *Taftas* were ‘plain silk goods’ originally. The term *tafta* is also used for the mixed fabric of silk and wool.¹⁹ The *taftas* were also ‘striped stuffs of silk and cotton’. It is also said that *tafta* cloth was made of two different kinds of thread, which reflected both the colours in the cloth. According to Tavernier *taftas* were made of silken clothes.²⁰ The *taftas* were produced in Bengal. Hugli and Qasimbaar were the main centres of production of *taftas*.²¹ Some other centres were Agra and Lahore.²² During the royal camp of Jahangir in Ajmer in 1616 striped bold *taftas* were also available. Coloured *taftas* were prepared in Bengal.²³

The Bengal silks were exported to other places also.²⁴ The Dutch took these silks to Japan and to Holland.²⁵ From Bengal they were also brought to Ahmedabad and Surat where they were woven into fabrics.²⁶ In Surat they were used to make three sorts of cloths – only of silk, of silk and gold, of gold and silver.

¹⁶ Tavernier, vol. 2, op. cit. pp. 2-3, 21-22.

¹⁷ Irwin John and Schwartz J P.R, op. cit. 1955A, p. 21.

¹⁸ Bernier, vol.1, op. cit., p 139.

¹⁹ Manrique, Sebastien, *Travels of Fray Sebastien Manrique 1629-1643*, ed. by C. E. Lourd, oxford 1927, vol. 1, p-30.

²⁰ Tavernier, vol. 2 , p.3.

²¹ *The English Factories*, 1661-1664, pp.62-63.

²² Ibid. 1668-69, p.167.

²³ *The English Factories*, 1664-1667, pp.46-62, 158, 290-291.

²⁴ Tavernier, vol. 2 op. cit., p.3.

²⁵ Ibid. p.3.

²⁶ Ibid.

Murshidabad in Bengal was another center for the production of raw silk.²⁷ A raw silk known as ‘*serbandy*’ was also produced in Patna.²⁸ ‘The *adhapatta*’ was another type of silk which means ‘half breadth’ and was made in Sind.²⁹ The *alacha* another important type of silk is noticed in the English factory records as the ‘*aliya*’, was a Turki word. It was a silk cloth with wavy pattern. *Alacha* is described as a silk cloth of 5 yard long which as a wavy line pattern running in length.³⁰ In *Ain-i Akbari* it is referred as *tarahdar* or corded. It was a kind of cloth woven of silk and thread which presents the appearance of cardamoms (*ilachi*). Bernier describes the *Alacha* as silken stuffs woven with gold and silver.³¹ Manucci refers to *alachak* silk cloth.³²

According to Mr. Yusuf Ali the *alacha* was probably introduced by the Mughals and was manufactured at Agra alone. But this cloth was produced at other places too.³³ The pure silk is known as *Gulbadans* produced in Tanjore and Tiruchirapalli. In which a large quantity of gold thread is used. *Brocade* was a silk stuff combined with the designs of flowers, foliage and ornaments.³⁴ The name brocade was derived from *broca* or reel carrying the silk or metal threads used in embroidery.³⁵ The Portuguese also traded in the brocades.³⁶

Kapoornoor or *kapoordhur* was another variety of silk cloth mentions in the *Ain* and other contemporary Hindi sources. According to Abul Fazl the cloth *Kapoornoor* was woven in Tibet and was renamed by Akbar as *Kapoornoor*.³⁷ The *pamri* was a sort of silk cloth. Ovington calls it a silk scarf.³⁸ The *pamri* cloth was also used as a turban.

The *tafsil* was a ‘striped stuff with silk and cotton’ costing from Rs. 7 to Rs. 12 per piece.³⁹ It was also termed as *tafsil* silk. Both broad and narrow *tafsils* were

²⁷ *The English Factories in India*, 1618-21, p.197.

²⁸ Ibid.

²⁹ *The English Factories in India*, 1646-50, p.29.

³⁰ *The English Factories in India*, 1618-21, p.197.

³¹ Bernier op. cit. pp. 120-121.

³² Manucci, *Storia- do-Mogor* (1653-1708); tr. William Irvine, vol. 2, Low price publication, Delhi, 2010, p.424.

³³ Ali, Yusuf A, Monograph on Silk Fabric, Allahabad, 1900, p.55.

³⁴ Manrique, vol.1, op. cit. pp.29-30.

³⁵ Ibid.

³⁶ Ibid. p.29.

³⁷ Abul Fazl *Ain-i-Akbari*, vol.1. trans. H. Blochman, reprint ed. in, Delhi, 2011, p.100.

³⁸ Ovington, *A Voyage to Surat in the year of 1689*. London, 1929. pp. 207-208.

³⁹ *The English Factories in India*, 1618-20, p. 61.

manufactured by Surat weavers at Surat.⁴⁰ The *nihali* was another silken cloth made at Malda. *Tabby* was sort of silk *tafta*.

Out of the many types of silk fabrics one was the plain, striped and checked fabric, made of silk and cotton, generally used for trousers, skirts, and the *cholees* too.⁴¹ Another important fabrics, also made of silk and cotton and commonly known as *Mushroo*, was satin 'with a cotton back'.⁴² This material was in great demand and was used in various ways by high class people for costumes and furnishings etc. Numerous examples of the specimens of the patterns produced in this material are known.⁴³

Some important silk fabrics and their position given in the *Ain-i-Akbari*⁴⁴ are;

<i>Qatifa-yi i Purabi</i> per yard	1 to 1½ R.
<i>Taja-baf</i> , per piece	2 to 30 M.
<i>Dara-i-baf</i> , per piece	2 to 30 M
<i>Mutabbaq</i> per piece	1 to 30 M
<i>Shirwani</i> per piece	1½ to 10 M
<i>Milak</i> per piece	1 to 7 M
<i>Kamkhab</i> , from Kabul and Persia, pier piece	1 to 5 M
<i>Tawar</i> per piece	2 R to 2 M.
<i>Khuri</i> per piece	4 to 10 R
<i>Mushjjar</i> , from Europe, per yard	2 R to 1 M
<i>Mushajjar</i> from yazd per piece	1 to 2 M
Satin, from Europe, per yard	2R to 1 M
Satin, from Hirat, per piece	5R to 2 M
<i>Khara</i> per yard	1R to 6 R
<i>Shirang</i> ⁴⁵ , per piece	1 to 3 M
<i>Qutni</i> ⁴⁶ , per piece	1½ R to 2 M
<i>Katan</i> ⁴⁷ , from Europe per yard	½ to 1 M

⁴⁰ Ibid, 1655-60, p.57 .

⁴¹ Watson J. Forbes, *Textile Manufacture and the Costumes of the People of India*, London, 1866, p. 97.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ *Ain-i-Akbari*, op. cit. p.99

⁴⁵ Changing silk

⁴⁶ A stuff made of silk and wool.

<i>Tafta</i> ⁴⁸ , from Europe per yard	¼ to 2R
<i>Anbari</i> , from Europe per yard	4 d to ½ P
<i>Darai</i> , per yard	1/5 R to 2 R
<i>Sitipuri</i> , per piece	6R to 2 M
<i>Qababand</i> , per piece	6R to 2M
<i>Tata bandpuri</i> , per piece	2R to 1½ M
<i>Lan</i> per yard	1/3 to 1/7 R
<i>Misri</i> , per piece	½ to 1 M
<i>Sar</i> , per yard	1/10 to 1/5 R
<i>Tassar</i> ⁴⁹ , per piece	1/3 to 2R
<i>Plain Kurtawar</i> satin per yard	½ to 1R
<i>Kapurnur</i> formerly called <i>Kapurdhur</i> , per yard	1/8 to 1 R
<i>Aleha</i> , per yard	1/5 to 2R
<i>Tafsila</i> , per piece	7 to 12R

This above list of silk stuffs is mentioned in *Ain-i-Akbari*⁵⁰.

Nature or Characteristic of Silk Fibre:

Silk is a fibre which is produced by insects in the form of a cocoon. The fibre which is generally used for manufacturing purposes are produced by the mulberry silk both of China, *Bombyxmori* and few other moths closely allied to that insect.⁵¹

The silk fibre is composed of fibroin and sericin, which contains a small quantity of pigments which is mainly found in the sericin, waxes, sugars and in organic substances which are found in both sericin and fibroin.⁵²

There are many kinds of silk fibres which are different from each other in various ways, but those which are used for clothing have some different characters.⁵³

These common characters are:

⁴⁷ Generally translated by linen. All dictionaries agree that it is exceedingly thin, so much so that it tears when the moon shines on it; it is Muslin.

⁴⁸ Properly, woven, hence taffeta

⁴⁹ Nowadays chiefly made in Behrampore and Patna; V.

⁵⁰ *Ain-i- Akbari*, op. cit. p.100.

⁵¹ Sharma, Suguna, *Studies in Indian Textiles*, Delhi,1998, p.68.

⁵² Ibid. p.69.

⁵³ Ibid.

The silk fibre used for clothing is fine and long. The molecules in a fibre are arranged in order and in some fibres they are twisted which is used not make a thread which is composed of orderly arranged and twisted fibre.⁵⁴

The tenacity, elongation and elasticity is the important feature of this fibre. These three points are important for the morphology of fibres, arrangement of molecules and use of fibres. There are many differences between different kind of fibres which are as follows :

- a) Differences in the structure and length of each molecule in fibres.
- b) Differences in the arrangement of molecules in a fibre.
- c) Differences of the structure and form occurred during the formation of fibres.

Therefore different kind of fibres even after resembling externally have different structures and they are used according to their structure.⁵⁵

Silk fibre is composed of proteins peculiar to it. Protein is a naturally existing highly polymerised substance. Cocoon filaments and raw silk consist of two different proteins, that is, fibroin and sericin. Such a dualistic structure can not be seen in other fibres. The silk fibre has characteristic elasticity.⁵⁶

During the Mughal period a great industrial development took place. During the reign of Akbar and Jahangir this industrial development reached its apex. These industries were producing goods not only for internal consumption but to export also. Dacca muslin was well known all over the world.⁵⁷

During the Mughal period industries were established all over India. Industrial centres were established in both rural and urban areas. The industries of rural areas were to fulfil the local needs or the needs of the people in villages. Whereas the urban centres were producing the goods on a vast scale. These industries were to meet the demands of the elite class or the members of royal family. At this period industries were not privately owned but was under the control of guilds. In this system middlemen were playing an important role. These middle-men used to pay in advance for the goods needed by them. During the reign of the Mughals Indian industry was at

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid., p.70.

its peak. After the Mughals there began a gradual decline and deterioration of the Indian industry.

Therefore the Mughal rulers were very fond of wearing the costumes made of silk. Among all types of silks the most famous during the Mughals was brocaded silk or silk embellished with gold and silver thread. The *patolas* were also very famous.

Velvets:

The Mughal emperors were presenting a number of robes of honour to the nobles of different rank annually. These garments were made of velvet, gold brocade and other fine fabrics. Since the reign of Humayun the Mughal emperors started to keep their wardrobe in which the robes of honour were always ready. He himself received about 200 garments made of velvet when he arrived to the court of Persia at the time of his retreat in 1544 AD.⁵⁸ Velvet was a material which was used for both the purposes as ceremonial costumes and for the cold weather clothing at the Mughal court. The Italian traveller Pietro Della Valle gives the reference of a high-ranking Mughal official wearing a velvet coat which was bordered with gold at the bottom.⁵⁹

Early record of Velvets is found during Timurids the ancestors of the Mughals used velvet in their Central Asian homeland.⁶⁰ Among all fabrics produced during the Mughals velvet was much gorgeous. Velvets sometimes are woven according to a simple concept i.e. with the introduction of additional warp threads into the warp and weft of the textile's silk based weave.

Velvet has remained the costume of the elite class during the Mughal period. It was the sign of the pomp and show of the Mughal court. The Mughal Emperor themselves were using it for the ceremonial purposes. In comparison to the other fabrics it was the first choice of the Mughal Emperors.⁶¹

Velvet was the textile favorite of Mughals which is made of three elements: a structural warp or vertical yarns, a structural weft or horizontal yarns and a non-

⁵⁸ Riazul Islam, *A Calendar of Documents on Indo-Persian relations (1500-1750)*, 2 vols. (Tehran, 1975), 1:75.

⁵⁹ Pietro Della Valle, *The Travels of Pietro Della Valle in India*, 2 vols. (London, 1892), 2: 248.

⁶⁰ Ellen S. Smart and Dale C. Gluckman *Cloth of Luxury: Velvet in Mughal India* in Krishna Riboud's *"In Quest of Themes and skills: Asian Textiles"*, Bombay, 1989, p. 39.

⁶¹ Ibid. p.36.

structural or supplementary warp. Velvet can be made of different fabrics but Mughal's velvets were generally made of silk.⁶²

Domestic and foreign sources of velvet:

During the second half of 16th century the plain and gold based velvets were produced in Ahmedabad and Lahore.⁶³ In the second half of the 17th century during the reign of Aurangzeb velvet was produced for the use of royal people at Ghargaon and Assam.⁶⁴ During the reign of Akbar velvet was imported from Europe and Yazd, Kashan, Herat and Mashad⁶⁵, the Safavid velvet producing centers. During the reign of Akbar's son Jahangir velvet was imported from China which was inferior to that of Persia.⁶⁶ The city of Ahmedabad was famous for its rich textiles.⁶⁷

When Babur founded his empire in India, he had no time to develop art and crafts. During his reign, we find the dominance of the Central Asian traits in fabrics either it was in the field of fabrics and other crafts. Humayun also could not develop crafts to a great extent because of the unstability of his empire. During his exile at Persia, he got highly influenced by the art and craft of Persia. Humayun brought with him the court painters of Shah Abbas and then the foundation of a new miniature paintings developed at the Mughal court. But it was the time of Akbar when a large number of workshops (karkhanas) related to the court were established in India.

Abul Fazl in his *Ain-i-Akbari* mentions that Akbar was highly influenced by the Giyatyad-Din Ali Naqashband of Yazd, who was the master brocade designer of Persia and was a man of considerable wealth, was a poet and collector of precious art objects and was a prestigious man of the Shah Abbas court. Akbar received the textiles signed by him as a present from the court of Persia.⁶⁸

During his reign of Akbar a number of royal workshops were established in India. This is visible in the description of the products produced at different centers given in *Ain-i Akbari*.

⁶² Ibid. p. 36.

⁶³ *Ain-i-Akbari*, op. cit. p. 98.

⁶⁴ Habib Irfan, *An Atlas of the Mughal Empire* (Delhi, 1982), p. 54.

⁶⁵ Ibid.

⁶⁶ Roe, Sir Thomas ; *The Embassy of, to the court of Great Mughals* (1615-19), London, 1926 , p. 285.

⁶⁷ William Foster , *Early Travels in India* (1583-1619), London, 1927, p. 206.

⁶⁸ Abul Fazl, *Ain-i-Akbari*, op. cit.

(a) Gold stuffs⁶⁹

- Brocaded velvets (*Makhmalai Zarbaft*) from Yazd per piece 15 to 150 *mohurs*.
- Brocaded velvets from Europe per piece 10 to 70 *mohurs*
- Brocaded velvets from Gujarat per piece 10 to 50 *mohurs*
- Brocaded velvets from Kashan per piece 10 to 40 *mohurs*
- Brocaded velvets from Herat per piece 10 to 40 *mohurs*.
- Brocade velvet from Lahore per piece 10 to 40 *mohurs*.

(Plain velvet from Europe per yard 1 to 4 *mohurs*.⁷⁰

- Velvet from Kashan per piece 2 to 7 *mohurs*.
- Velvet from Yazd per piece 2 to 4 *mohurs*.
- Velvet from Mashhad per piece 2 to 4 *mohurs*.
- Velvet from Herat per piece 1½ to 3 *mohurs*.
- Velvet from Khafi per piece 2 to 4 *mohurs*.
- Velvet from Lahore per piece 2 to 5 *mohurs*.
- Velvet from Gujarat per yard 1 to 2 rupees.
- *Qatifa-yi-I Purabi* per yard 1 to 1½ rupees.

From this list it is clear that during the reign of Akbar, velvets were woven in Gujarat, Lahore Eastern India and possibly Bengal. In Gujarat and Lahore good quality voided velvets, *Makhmali Zarbaft* were produced. Lahore was a center which was producing excellent quality of brocaded velvets. We also find the reference of voided velvets with gold background on the account of Edward Terry.

It appears that during the reign of Jahangir velvets were exported to foreign country, which is clear from Sir Thomas Roe's account, he describes that Sultan of an Arab Kingdom at the mouth of the Red sea "met us with all his pomp... His clothes are of Surat stuff after the Arab manner a cassock of wrought velvet red and white and another of green gold...."⁷¹ So far as the reign of Shah Jahan is concerned the use of velvet continued to a great extent but the peculiarity was that the more and more decorated velvets were produced during his reign and there was an extensive use of gold and silver work on velvet. And the fine quality of velvets were produced at

⁶⁹ *Ain-i-Akbari*, op.cit.p.98

⁷⁰ *Ibid*.p.99

⁷¹ Foster W. op .cit.

different centers like Delhi, Agra, Lahore Ahmadabad, Surat and Jaipur. With the decline of Mughal Empire the production of finest quality of velvet also discontinued. The most finest quality of velvet produced from Akbar to ShahJahan's reign. Then with the disintegration of Mughal Empire the velvet weaving industries also affected adversely.

● Cotton Muslins:

Cotton fabrics are the most preferable products of India. The cotton *muslins* are the most famous products of India and known by different names as 'woven air', 'running water' and 'evening dew'.⁷² *Muslin* was the main production of cotton weaving industry of India. It was produced all over the country. No other fabric can compete the delicacy of muslin of India. Plain muslin as produced almost all over the northern India. But the most famous among all were the muslins of Dacca.⁷³

During the Mughal period the most important industry was the cotton industry. Under the Mughals Dacca *muslin* were the most famous of all cottons. During this period most of the part of the production of Dacca muslin was consumed by the Mughal royalty.⁷⁴ *Muslin* is called by different names such as: *shabnam* (evening dew), *Ab-i-Rawan* (running water), *baftnma* (woven air), *malmal-i-khas* (king's Muslin), *sarbati* (sweet as sherbate). *Ain-i-Akbari* has mentioned several varieties of cotton stuffs used at the Mughal court e.g. *Khasa*, *Chautar Malmal Tansukh*, *SiriSaf*, *Gangajal*, *Bhiraun*, *Sahan*, *Jhona*, *Asawali*, *Bafta*, *Mahmudi*,⁷⁵ *Panchtoliya*, *Jhola*, *Salu*, *Doriva*, *Bahadur Shahi*, *Garba Suti*, *Shela*, from the Dakhin, *Mihrkul*, *Mindil*, *Sarband*, *Dupatta*, *Katancha*, *Fota*, *Goshpech*, *Chhint*, *Gazina*, *Silahati*⁷⁶ etc.

Jamdani is an ancient fine *muslin* cloth with geometrical, floral designs. The origin of the word *Jamdani* is uncertain. One popular belief is that it came from the Persian word '*Jama*' which means cloth and '*dana*', which means *buti* or diapering. *Jamdani* therefore could mean diapered cloth. Thus the word *jamdani* means loom embroidered or figured, and is applied both to the woolen weaves of Kashmir as well

⁷² Saraswati S.K.; *Indian Textiles*, 1961, Faridabad, p.1.

⁷³ Ibid., p.3.

⁷⁴ Biswas A, *Indian Costumes*, New Delhi, 1985, p.110.

⁷⁵ *Ain-i-Akbari*, op.cit.p.100

⁷⁶ Ibid. p.101

as to the cotton flowered weaves of Gangetic plain.⁷⁷ It is probable, that the Muslims introduced *Jamdani* weaving industry and was their monopoly for a long.

From the earliest times, the Gangetic plain was famous for its fine *muslins*. Banaras was famous for its muslins and the finest of them are known as Kasivastra.⁷⁸ The *Majjhima Nikaya* mentions the fact that the great development of fine cotton in Banaras was due to the growing of fine grade cotton, the presence of proficient spinner and the softness of the water for washing and bleaching.⁷⁹

The flowered, *muslins* have small flowers sprays worked on them with unequalled delicacy of touch. The *malmal khas* or 'kings muslin' are made in length of 10 yards and one yard in width, containing from 1000 to 1800 threads in the warp. These could only be made during the rainy season, the moisture in the air allowing the very fine thread to be woven, and a time of about five month was required.⁸⁰

Among all the figured *muslins*, *Jamdanis* are the most beautiful. In *Jamdani* muslins the designs are inserted by the hand during the process of weaving and producing the effect of embroidery. In *Jamdani* weaving gold, silver and coloured thread are through the warp.⁸¹ Dr. James Taylor describes the process of weaving these figured fabrics.⁸² "In manufacturing figured fabrics two weavers sit at the looms. They place the pattern drawn on paper, below the warp, and arrange along the track of the woof a number of cut threads equal to the flowers or parts of the design intended to be made and then, with two small fine pointed bamboo sticks, they draw each of these threads between as many threads of the warp as may be equal to the width of the figure which is to be formed.⁸³ When all the threads have been brought between the warp they are drawn close by a strokes of the day. The shuttle is then passed by one of the weavers through the shed, and the weft having been driven home, it is returned by the other weaver. The weavers resume their work with their pointed bamboo sticks and repeat the operations with the lay and shuttle in the manner above described, observing each time to pass the flower threads between a greater or

⁷⁷ Jayakar, Pupul: "Cotton *Jamdani* of Tanda and Banaras", in Dhamija, Jasleen and Jain, Jyotindra, editors. *Hand woven fabrics of India*. Ahmedabad: Mapin, 1990 . p.97.

⁷⁸ Ibid. pp. 98-99.

⁷⁹ Ibid. p.99.

⁸⁰ Mehta Rustam J., *The Handicrafts and Industrial Arts of India*, Bombay, 1960, p.97.

⁸¹ Ibid.

⁸² Sharma Suguna, op. cit. p.67

⁸³ Ibid.. p.68.

less number of the threads of the warp, in proportion to the size of the design to be formed”.⁸⁴

The most important thing about the *Jamdani* fabric is its variety of designs, some of which are of Persian origin,⁸⁵ like small sprays or *buti* of flowers like the jasmine (*chameli*), the marigold (*genda*) and the patterns of small circular dots (*chanda*), stars (*tara*), betel leaves (*pan*) and bouquets of flowers (*tora*) are also used. The main emphasis of the patterns of *jamdanis* are the brocades. Brocades are usually applied of silk fabrics but the figured and flowered *jamdanis* of Dacca looks like the silk brocades.⁸⁶

Cotton textile fabrics are having a long historical base. Cotton weaving and cotton spinning are well known to Indian sub-continent since ancient period. Cotton is a fabric made from the fibres taken from the seeds of the cotton plants. The woven fabrics are always having a great importance. India produces the enormous variety of cotton products. From the ancient period to 18th century, India was the supplier of cotton to all countries in the world.⁸⁷

In India there was a tradition of hand-woven clothes since the ancient period. Most probably hand spinning and weaving is the most ancient craft of Eastern world.

Among all cotton fabrics *muslin* was the most fabulous and preferred fabric of India. It is well known by the poetic names i.e. *abrawan* or *ab-i-Rawan* or running water, *Bafthawa* or *Bafthma* (woven air), *Sharbati* (sweet as *Sherbat*) and *Shabnam* (evening dew). These lovely words are used for *mulmulkhas* or *muslin*.⁸⁸

The *muslin* was so famous for its fineness that it seemed invisible under water most of the time. There is a story about the fineness of *muslin* that Zeb-un-Nissa daughter of Aurangzeb was asked by her father that she was desecrating the dignity of the royal court. The princess calmly replied that she was fully covered. She was covered with not one but seven *Jamas* covering her slim body. No doubt Dacca muslin was world famous during the medieval period.⁸⁹

⁸⁴ Ibid.

⁸⁵ Saraswati, op.cit., 1961

⁸⁶ Sharma Suguna, op. cit. p.68.

⁸⁷ Ibid.

⁸⁸ Mehta Rustam J., op. cit. p.4.

⁸⁹ Ibid., p.5.

Among all types fine *muslins jamdani* was more famous and the finest. The *jamdani* was a type of figured muslin. Among all the production of Dacca loom the *jamdani* was the most finest. On *jamdani* cloth motifs were worked out weave pattern which gave an effect of embroidery. The method of production of *jamdani* was similar to the tapestry work. In the method of production the coloured, gold and silver thread are passed through the warp. Generally the paper pattern are used in it. The *jamdani* was the most famous and expensive cloth of Dacca. During the Mughal period *jamdani* was the finest type of muslin which was in vogue.⁹⁰

The fabric of *jamdani* was often in grey cotton with bluish embroidery over it. Sometimes black embroidery was also used with the combination of gold and silver thread. The designs which were in vogue during the Mughals were mostly of Persian origin. But the figured and floral patterns executed on *jamdani* cloth were not altogether of Persian origin but were the combination of indigenous and Persian origins. The most popular design of *jamdani* motif is the large rosettes set. The *jamdanis* which were in white were decorated in yellow, red, blue or black cotton to form heavy designs.⁹¹

Abul Fazl's *Ain-i Akbari*, furnishes perhaps the most informative account of woven loom textiles developed under the Muslims and testifies intelligent patronage of the emperor Akbar.

The weavers were not allowed to sell the pieces of muslin for more than 72 lives. Therefore the merchants were purchasing muslins through the government intermediaries who paid annually to the government for these privileges. In its return they were allowed to take their commission.

In the *Ain-i Akbari*, there is no mention of the word *Jamdani* in the list of cotton cloths acquired for the royal wardrobe. The name *tanzeb* appears and is used as an alternative word for a coat or a type of jacket in *Ain-i Akbari*. This was a type coat made from the finer types of *Jamdani* cloth, the words *tanzeb* and *pench* being used even today to denote the most expensive type of figured muslins. Although no direct information exists, it is likely that royal Karkhanas were set up under the Mughals for

⁹⁰ Ibid.

⁹¹ Ibid.

the manufacture of *jamdani* cottons. Forbes Watson mentions special *jamdanis* woven at Dacca for Aurangzeb costing £ 31 par piece.⁹²

So far as the manufacturing technique of the *jamdani* is concerned, the fineness of muslin cloth used to depend usually on the art of making yarns. The most appropriate time for making yarn was early morning as the air then carried the highest moisture. For making yarn weavers needed, a bamboo basket, a shell and a stone cup. They used popcorn rice or barley for starch. Before making *jamdani* design they used to dye their yarn and starch it. For dye they used flowers and leaves of creepers. The method of weaving resembles tapestry work in which small shuttles of colored, gold or silver threads – are passed through the weft. The *jamdani* dexterously combines intricate surface designs with delicate floral sprays.

The ornamental figures are woven by two threads of yarn of the same count as in the background, being introduced into the cloth by means of extra spools, the threads of which are passed under and over the ornament as many times as are required to for the design.⁹³ The threads selected for this purpose are lifted up by the weaver with his finger.

We do not know exactly when *jamdani* came to adorned with floral patterns of the loom. It is, however, certain that in Mughal period, most likely during the reign of either Emperor Akbar (1556-1605) or Emperor Jahangir, the figured or flowered muslin came to be known as the *jamdani*. Forbes Watson in his most valuable work titled ‘Textile Manufacture and Costumes of the people of India’ holds that the figured *muslins*, because of their complicated delights, were always considered the most expensive productions of the Dacca looms.⁹⁴

So far as the designs and colors are concerned they were changing from time to time. In court textiles produced by the royal *karkhanas* of the Mughals, living forms of birds and animals disappear, and only floral ornaments are introduced into the cloth, this taboo being rigidly enforced in all textiles to be worn on the body. The

⁹² Watson J. Forbes , *Textile Manufacturers and Costumes of India*. “The *Jamdani* or loom figured muslins, from the exquisite delicacy of manipulation which many of them display, may be considered the chef-d’ oeuvre of the Indian weaver. From their complicated designs they have always constituted the expensive productions of the Dacca loom. Those manufactured for the Emperor Aurangzeb are stated to have cost 31, while some manufactured in 1776 reached the extravagant price of 56 per piece.” p.102.

⁹³ Ibid., p. 102.

⁹⁴ Ibid.

same prohibition exists even today among the weavers of *Chanderi*.⁹⁵ The concept of colors also undergoes a change. In the list of colors mentioned in the *Ain-i Akbari* as comprising the royal wardrobe, there is no longer mention of the various tones of white. Here it is mentioned the white and black are believed to be the origin of all colors.⁹⁶ The *kora* unbleached cloth which has ritual significance to the Hindu gives place to the bleached *jamdani* worn at the Mughal.⁹⁷

Apart from them intended for the production of angarkhis the *jamdani* cloth is woven for caps and for saris. Borders, pillars or end pieces of saris and the buta (small motifs) are woven. The forms of the ornament are floral. The flowers which decorate the cloth are woven either vertically or horizontally. The *chameli*, *mogra*, *juhi*, *khaspomera*, *genda*, *khaskamana*, *ishqapech*, *harsingar*, *phulbanjari* are some of the common flowers used for the designs. The following names of designs have been given by one of the best known *jamdani* weavers of Tanda.

Airbel (*bel*, meaning creeper or climber) – running figures arranged diagonally. The *laharia* (*lahar*, meaning a wave) – figures like the wave of the sea. Harsara – straight or wave – like vertical lines interspersed with little flower like motifs. *Kharibel* – running figures arranged horizontally. *Kangura* – border about 3” wide for *saris*, *dupattas*, blouses etc.⁹⁸

The most important feature that distinguish the flowered muslin of Tanda from other ornamental weaves are the use of the twill tapestry technique of weaving and the absence of the *naqsh* and of the function of the *naqshband*. John Irwin in his monograph on shawls has traced the origin of the twill tapestry technique to the time of Zain-ul-Abidin (A.D. 1420-1470) of the opinion that weavers from Turkistan introduced the twill-tapestry technique into India. He supports this view on the basis that the twill-tapestry technique of weaving apart from the tilikar weaving of shawls in Kashmir, does not exist in any other part of the Indian sub-continent and the technique used in the weaving of these Kashmir shawls can be traced back to the introduction of artisans into Kashmir at the time of Zain-ul-Abidin.⁹⁹

⁹⁵ Dhamija J., op. cit.pp.100.

⁹⁶ *Ain-i Akbari*, op. cit. pp.102.

⁹⁷ Dhamija, J. , op. cit.pp.100.

⁹⁸ Ibid. pp.101.

⁹⁹ Irwin, John, *Shawls: A study in Indo-European Influences*, London, 1955, p. 2.

It is concluded that in spite of the pomp and show of the Mughal rulers they preferred the costumes made of muslin to a great extent. Main reason behind it was that it was well suited to the Indian climate, and widely produced in India.

Woolen Stuffs:

The English word Shawl is derived from the Persian word *Shal*. It should be considered as a class of woven fabric in place of a particular dress, these *shals* could be used as a girdle, a mantle, a scarf, or a turban. We can differentiate on the basis of the quality of the material used for making these garments.¹⁰⁰ The material used for making Kashmiri Shawls was fleece taken from the Centre Asian species of the mountain goat known as, *Capra hircus*. In west it is known as either *Pashmina* or Cashmere, derived from the old spelling of Kashmir.¹⁰¹ The term Cashmere is misspelled as these shawls were produced in Kashmir but the wool used for making these Shawls was imported from Tibet or Centre Asia and was not produced locally.¹⁰²

Kashmir shawls are the most unique achievement of Indian sub-continent. As they are woven slowly by the skilled craftsmen using the rarest materials, produced in unusual structure, which was confined to a single geographical area etc. On the basis of all above feature we can imagine that how these world's finest textiles were created. It might be said on the bases of the researches done in this field that whatever information are available about Kashmir shawls is a combination of ambiguous facts, hyperbole, and pure fiction in some cases.

When we read the histories of Kashmir either from early travellers accounts or from other modern works we find a very contradictory picture of the facts available on Kashmir shawls. In spite of these contradictions many unsupported facts are accepted by some historians. Among these the most common errors first was that the weaving of shawls¹⁰³ in Kashmir began during the reign of the Kashmiri Sultan Zainul'Abidin in the 15th century, second was that the shawl weaving was a technically complex procedure which requires specialized equipments; and the third is the confusion about the identity of the materials used to weave Kashmiri shawls.

¹⁰⁰ Ibid, p.2.

¹⁰¹ Ibid.

¹⁰² Ibid., p.3.

¹⁰³ Barnes Ruth, Cohen Stevan, Crill Rosemary; Trade Temple and Court Indian Textiles from Tapi Collections, Mumbai, 2002, p-112.

The most confusing fact about these Kashmiri shawls is its genesis. Sultan Zain-ul-Abidin is generally considered the first who encouraged the production of shawls in Kashmir, who was a prisoner of Timur, a Turko-Mongal conqueror in Samarkand.¹⁰⁴ After the death of Timur Zain-ul-Abidin was released, and this enlightened Sultan encouraged the production of shawls in Kashmir by inviting weavers from Turkestan to Kashmir to teach the native weavers but this story seems untrue. Because Zain-ul-Abidin was not even born when Timur invaded India in 1398. He was never ever a Timur's prisoner in Samarkand but his long peaceful reign in Kashmir (1420 to 1470) provided time for innovation in craftsmanship in Kashmir valley, but woven shawls had already been woven there for many centuries before 15th century, but it was not introduced during his reign.

An Austrian Baron, Charles von Hugel¹⁰⁵ also gives an interesting account. Who gives his argument on the basis of Rajatarangini that during the reign of Zain-ul-Abidin artists came from 'long distances' to his court and the weavers of Kashmir learned to weave valuable cloths of silk and wool, some of which were patterned and decorated with creeper designs.¹⁰⁶ In one of the Rajatarangini's passage Srivara described neighboring Jammu as a 'foreign country', so it is clear that he talked simply about a valley next to Srinagar. Therefore, it is clear that the Rajatarangini does not mention about weavers came from Turkestan, or from any other specific place. In this way Srivara's Rajatarangini also provides little information about the shawls of Kashmir.

The list of woollen fabrics mentioned in *Ain-i-Akbari* is as follows;

Scarlet Broadcloth, from Turkey, Europe, and Portugal,	
<i>per yard</i>	2¼ R. to 4 M.
Do., from Nagor and Lahor, <i>per piece</i>	2 R. to 1 M.
<i>Suf-i murabbas</i> , do.	4 to 15 M.
<i>Suf-i...</i> , do.	3 R. to 1 1/5 M.
<i>Parmnarm</i> ¹⁰⁷ , do.	2 R. to 20 M.
<i>Chira-yi Parmnarm</i> , do.	2 R. to 25 M.
<i>Fota</i> ¹⁰⁸ , do.	½ to 3 M.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ *Ain-i-Akbari*, op. cit. p. 101.

<i>Jamawar-i Parmnarm</i> , do.	½ to 4 M.
<i>Goshpech</i> , do.	1½ R. to 1½ M.
<i>Sarpech</i> , do.	½ to 4 M.
<i>Aqhri</i> , do.	7 R. to 2½ M.
<i>Parmgarm</i> ¹⁰⁹ , per piece	3 R. to 2½ M.
<i>Katas</i> , do.	2½ R. to 10 M.
<i>Phuk</i> , do.	2½ to 15 R.
<i>Durman</i> , do.	2 R. to 4 M.
<i>Patu</i> ¹¹⁰ , do..	1 to 10 R.
<i>Rewkar</i> , do.	2 R. to 1 M.
<i>Misri</i> , do.	5 R to 50 R.
<i>Burd-i Yamani</i> , do.	5 R to 35 R.
<i>Manji namad</i> , do.	2 R. to 1 M.
<i>Kanpak namad</i> , do.	2 R. to 1 M.
<i>Takyal namad</i> ¹¹¹ , from Kabul and Persia	*
Do., country mae, do.	1½ to 5 R.
Lo'i, do.	14 d. to 4 R.
Blankets, do.	10 d.to 2 R.
Kashmirian Caps, do.	2 d. to 1 R.

Confusion over material: Pashmina and Tus:

There is a confusion regarding the materials used in the weaving of traditional Kashmiri shawls. Most of the authors mention about goat hair both domestic and wild, some mention about sheep wool, while the other mention of the wool of wild mountain sheep, ibex and even antelopes are sometimes woven into fine shawls. The main difficulty here is to match the specific local names for these materials; *Pashm*, *Pashmina*, *tus*, *asalitus* and *shah tus* with their correct zoological sources.¹¹²

The most of the good quality of Kashmiri shawls were woven entirely with *pashm* wool. In Kashmir the word *Pashm* is used for the raw, unprocessed soft, fine under hair hand-combed from a domesticated goat (*Capra hircuslaniger*) which is still

¹⁰⁸ Ibid.101.

¹⁰⁹ Ibid.102.

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² *Trade Temple and Court*, op. cit. p.114

raised in Ladakh, the vast arid region directly to the east of Kashmir. Nowadays a number of larger herds of *Pashmina* goats are also commercially reared in Tibet, Mongolia and Chinese Central Asia (Xinjiang), but most of the *Pashmina* used in Kashmir was coming from the Chang Thang Plateau in Ladakh, at altitudes of over 14,000 feet, as well as from western Tibet and Yarkand. It is considered that no *Pashm* was ever produced in Kashmir itself, but the Kashmiris held a monopoly on the purchase of all Ladakhi *Pashm*, as they were the only ones who were capable of hand spinning the very finest grades of *Pashm* thread. Therefore, the woven material *Pashmina* has always been associated with Kashmir rather than Ladakh or Tibet and in the west, *Pashmina* is known as Cashmere or Kashmir wool because its actual source was never cleared.¹¹³

But all Kashmiri shawls were not woven with *Pashmina*. The shawls mixed with silk and *pashm*, woven in Lahore were already mentioned by Abu'l Fazl in the *Ain-i-Akbari* of the 1590s. It was called *mayan* which consisted of silk and wool mixed.¹¹⁴ Historically the most expensive and rarest of all Kashmiri shawls were woven from the wool of various wild mountain sheep, ibex, (*Capra ibex siberica*), and most commonly important, a small Tibetan antelope (*Pantholops hodgsoni*), which are known in Ladakhi as *stos* and in Tibetan as *chiru*. A small quantities of these wool was collected by herders and nomads when the beasts rub them against rocks and shrubs in the season of spring to rid themselves from the thick winter coats.

The shawls made of this costly material in Kashmir was known as *tus*, *aslitus* ('genuine' *tus*) or *shah tus* (kingly *tus*) and was costly because its diameter was smaller (10 micron wide) in comparison to the diameter of *Pashm* fibres. (15.5 microns)

According to Moti Chandra, Ksemendra's 11th century works *Desopadesa* and *Narmamala* give the reference of weaving and designing of woollen Kashmir shawls of different qualities and colours.¹¹⁵ The difficulty was that the meaning of the word was changing from time to time. In Ksemendra's work we find the reference of cloths woven of *tus*, an antelope hair by using the word *tusta-pravarna*, which resembles with *tus*. Chandra describes the history of shawl weaving in Sind, Punjab and hilly

¹¹³ Trade Temple and Court, op. cit. p.114

¹¹⁴ *Ain-i-Akbari*, op. cit., p. 98.

¹¹⁵ Chandra, Moti, *Costume Textiles Cosmetics and Coiffure in Ancient and Medieval India*, Delhi, 1973, p.231.

regions such as Swat which surrounded Kashmir, we don't find any direct reference to Kashmir.¹¹⁶

In *Mahabharata*, we find the reference of many gifts in form of *Kambala*, woolen blankets or shawl. The sources of these textiles are mentioned as Kamboja, ancient Bacteria in Afghanistan and Iran, and China. It is also mentioned that these textiles were made of goat hair called *Rankava*.¹¹⁷ A relative term *Ranku* is also found in the Buddhist Amarkosa of the Gupta period. Similarly, we find the reference of a term *Rang* used by the Mughal Emperor Jahangir, in 17th century, which describe the two varieties of wild antelopes, one of which was the caprasiberica, a minor source of Tus. Therefore Chandra's account about the genesis of the shawl material seems convincing to some extent, that the tradition of importing fine goat hair cloth into northern India from far and wide sources.¹¹⁸

Therefore, the weaving of patterned woolen shawls in the Kashmir valley is well described by Srivara in 15th century in his *Jaina Rajatarangini*, it is similarly discussed in Ksemendra's 11th century *Narmamala*. Woolen cloth weaving was in vogue even during the 4th-2nd century B.C. According to Chandra some of these cloths were woven from Pashmina while others were made from Tus. If it was so then the rare materials imported from Central Asia and China and was passing through Laddakh to Kashmir.¹¹⁹

Cashmere:

Cashmere forms the most gorgeous item of an Indian wardrobe. Cashmere¹²⁰ was not only famous in India but it attracted Europeans also. The Persian meaning of that is a fine woven woollen fabric.¹²¹ Of all Indian "textiles" observes Ananda K. Coomaraswamy, "none excels in beauty of colour, texture and designs the famous Kashmiri shawls".¹²² The main raw material for making shawls is wool which is

¹¹⁶ Trade Temple and Court Indian Textiles from Tapi Collections, op. cit. p.117.

¹¹⁷ Ibid., p.117.

¹¹⁸ Ibid., p.117.

¹¹⁹ Ibid., p. 118.

¹²⁰ Here along with the aforesaid predominant motifs, geometrical motifs, mosaic patterns and zigzags in rich colours were in vogue in the pattern scheme of Mughals and others.

¹²¹ Bamzai, P.N.K. *A History of Kashmir*, Delhi, 1962, 448

¹²² Coomaraswamy Ananda K., *The Arts and Crafts of India and Ceylon*, London, 1913, p.250.

provided by shawl goats (*Capra*) which was inhabited the region of Central Asia, Tibet and Ladakh.¹²³

In summers they rub their body against rocks and shrubs from where the wool was collected once a year. Generally the hairs of the shoulders, chest and abdomen regions is of fine quality, which are laboriously separated from coarser hair. Therefore this wool was used to make the *Asli Tush*, *Shahi Tush* and *Pashmina*.¹²⁴

The art of Kashmiri shawls was fabulous in its colour schemes. During the Mughal period more than three hundred shades were in vogue.¹²⁵ The main colours which were in vogue are white (*safed*), grey (*tush*), scarlet (*lal*), golden (*zari*), yellow (*zard*), brass (*brinji*), mauve (*unnavi*), purple (*sosni*), pink (*gulabi*), mango-green (*ambone*), apple-green (*sebki*), parrot-green (*tutki*), blue (*asmani*), almond (*badami*), magenta (*magithi*), pista-green, or light brown (*bhojapatra*) to mention a few.¹²⁶

The peculiarity of this period was that in place of synthetic colours, vegetable dyes were used – blue and purple from indigo, orange and yellow from carthamus and saffron and red from log-wood. When we analyse the designs and motifs used for decorating shawls we come to the point that they were of limited nature.

Plant foliage, fruits, creepers, stems and animals figure were generally used for ornamentation of shawls. The oldest shawl piece which is survived is preserved in the Calico Museum of Textiles in Ahmedabad¹²⁷, and it belongs to seventeenth century. The pattern used here is the slender floral rows with a thin significant border.¹²⁸ A similar single flower motif piece is preserved in the Bharat Kala Bhavan, Varanasi.¹²⁹

The *buta*, generic form of floral motifs¹³⁰, was transferred into a formal shape, a cone derived from the Persian wind blowncypru.¹³¹ At the same time this motif also resembles with the textile patterns Gujarat and Rajasthan.¹³²

¹²³ Sukladas, *Fabric Art heritage of India*, 1992, New Delhi. p.38.

¹²⁴ Irwin John , *The Kashmir Shawl*, London, 1973, p.5.

¹²⁵ Abul Fazl, *Ain-i-Akbari*, op. cit. p.97.

¹²⁶ Ibid. p.97-98.

¹²⁷ Irwin John , 1973, op. cit., 11.

¹²⁸ Ibid., plate 1.

¹²⁹ Singh Chandramani and Devaki, Ahivasi, 'Woolen Textiles and Costumes from Bharat Kala Bhavan, Banaras Hindu University, 1981, pl. 2.

¹³⁰ Birdwood G.C.M , *The Industrial Arts of India*, London, 1880, 280.

¹³¹ Anand K. Coomaraswamy, op. cit., 251.

¹³² Chandramani Singh and Devaki Ahivasi, op. cit., 9.

The fleece was taken from the animals as it was the natural protection from the severe cold of winters. It comes out of the rough outer hair. Goats were the main source of shawl wool, a similar fleece was derived the Himalayan mountain sheep such as Shapo, the Argali, the Bharan and the Himalayan Ibex. It is also believed that the Tibetan Shepherds' dogs were also used for this fleece.¹³³ This fleece is also divided into two or more distinct grades. The best one renowned for its warmth and silkiness was *aslitus* which was taken only from the wild animals, collected from the rocks when the animals rubbed themselves in summers.¹³⁴ The second type of shawl wool was taken from the same species of the domestic goats. This provided the plenty of material for the Kashmir Shawls. Most of it was coming from Laddakh and Western Tibet. This was supplied by the herds of nomadic Kirghiz tribe and was imported through Yarkand and Khotan.¹³⁵

Therefore fine shawls were produced on a large scale in India. But the raw material used for making shawls was not available locally. It was imported from China, Tibbet, Leh Laddakh and other areas also but were produced mainly in Kashmir. Thus Kashmir has remained the major center for the production of Shawls.

Thus it is concluded that under the Mughal rule, patronage given to the textiles was remarkable. The Textiles mainly preferred by the Mughals were very gorgeous. They used to prefer the textiles made with very fine material and obviously the cost of these textiles was very high as it was used by the royalty. As discussed above among Silk the Mughals preferred silk brocades and *Patolas* silk. Among different varieties of cotton, *muslin* and *jamdani muslins* or figured *muslin* were mostly preferred by the Mughals, as India was the major producer of cotton textiles there was a plenty of raw material for cotton goods. The woollen fabric mainly used by the Mughals were of *pashm* wool and *tus* or *asli tus* wool which was produce locally but the raw material was imported from outside.

¹³³ Vinge G.T., *Travels in Kashmir*, Laddakh and Iskardo, vol.2, London, 1842. p.124.

¹³⁴ Mannucci, op. cit., vol.2, p.341.

¹³⁵ Irwin John; Shawls, *A Study in Indo-European influence*, London, 1955, p.6.

CHAPTER-4

TEXTILE INDUSTRIES DURING THE MUGHALS

Types of Textile Industries under The Mughals:

There were two types of karkhanas during the Mughal period. One was the artisan system in which the independent artisans were supplying their own capital, their own material and their own labour to manufacture the goods and the other was the karkhana system in which the artisans were working in karkhanas on the order of the state.¹ The state karkhanas were established generally in towns and particularly in prominent cities i.e. in Delhi, Agra etc. which is well described by Abul Fazl and Bernier.²

In Mughal India karkhanas were under the direct control of the state. The modern system of contractors was absent there and the cottage industries were to capable of satisfying the state demand.³ The state was responsible for producing each and every item of its use.⁴ There were so many needs of the state i.e. the state was giving a robe (*khilat*) to the *mansabdars* twice in a year. The Hindus and other noble were receiving these robes from the emperor on the two birthdays (solar and lunar) of the emperor.⁵

The number of *mansabdars* was 7500, who were paid in cash and there were 7000 *mansabdars* who were paid in Jagirs.⁶ Therefore the Mughal government was producing almost each and every item of its need, because the modern system of private karkhanas was absent there⁷. The Mughal rulers were encouraging the production of many items i.e. beds, tents, clothes, jewellery, gold and silver wares perfumes, medicines, shawls, turbans and other metals. The Emperor was giving almost thousands of robes of honour to his officers and others.⁸

There are many sources telling about the number of karkhanas. There were 12 treasuries and 36 karkhanas. The Marathi works like *Sabhasad Bahar* and the *Chitnis*

¹ Verma Tripta , *Karkhanas under the Mughals from Akbar to Aurangzeb, a study in economic development*, Delhi, 1994, p. 15.

² Moreland, W.H., *India: At the Death of Akbar, An Economic Study*, London, 1920 pp. 172-74.

³ Verma Tripta , op. cit., p 17.

⁴ Ibid., p. 17.

⁵ Sarkar Jadunath , *Mughal Administration*, Calcutta, 1952, p. 17.

⁶ *Zawabit-I - Alamgiri*, MS, Br. Museum .Or. 1641, 15a.

⁷ Verma Tripta , op. cit., p. 18.

⁸ Ibid.

Bakhar mention only 18 karkhanas. According to Zawabit-i-Alamgiri⁹ there were 69 karkhanas. The Ain-i-Akbari tells about 26 main karkhanas and it indirectly tells that there were 10 karkhanas also.¹⁰ Therefore there were 36 karkhanas in total.

The state karkhanas were producing the good for khilat robe of honour which was consisted of several items distributed by the emperor on several occasions i.e. coronation ceremony, the two Ids, the solar and Lunar weighments. Robe of honour was not only given to the military department¹¹ but also to everyone present at the court. There were several categories of khilat, those of three, five, six or seven pieces. A three piece (khilat) consisted of a long coat with full skirts (jamah), a turban (dastar), and a scarf for the waist (Kamarband). Other was a five piece robe came from the Tosha-khana (store house for presents), the extra piece being a turban ornament called a sarpech and a band for tying across the turban (balaband).

For the next grade was a tight fitting jacket with short sleeves, called a half sleeves (nimastin) was added. Tavernier also gives the details of the seven piece khilat, the cap, the cabaya or grand robe i.e. royal robe (long gown), (a coat with sleeves) or cassock, two pair of drawers, two shirts and two girdles with a scarf to be worn round the neck and upon the head for protection against the heat of the sun.¹²

The karkhanas also prepared dresses for the royal wardrobe. The harem clothes, garments, and hundred other items were manufactured in the royal karkhanas. Clothes, embroideries, carpets were prepared in the royal karkhanas and imported from abroad.¹³

Thus valuable articles prepared in these karkhanas were to meet the needs of the emperors and courtiers.¹⁴

Silk Proto-Industry :

During the Mughal period Bengal was the main silk producing center.¹⁵ A large scale silk industry was existed in Bengal. The other important centers where

⁹ Sarkar Jadunath , op. cit. p. 125.

¹⁰ Verma Tripta , op. cit., p. 20.

¹¹ Irvine William, *Army of the Indian Mughals*, London, 1903, p. 29

¹² Tavernier, Jean Baptiste, *Travels in India*, tr. by. V. Ball and ed. by W. Crooke, London, 1925, vol. 2, p. 132.

¹³ Verma Tripta, op. cit. p. 62.

¹⁴ Ibid.

¹⁵ Ghose, R.R. *Decline of silk industry in Bengal and How to arrest it* (Calcutta, 1915), p 1.

sericulture was practiced in India were Kashmir, Assam and Western India.¹⁶ But Bengal was the main center of silk production. The silk produced in Bengal was exported not only out of India but also to Gujarat and other silk weaving canters of India.¹⁷ Use of silk was prohibited in Islam as its use was considered unlawful for Muslim males.¹⁸ But this Islamic religiosity could hardly control the use of silken fabrics by Muslim elites.¹⁹ The climatic condition of India also supported the use of silk for most of the parts of India.

Silk was generally used for ceremonial purposes. Delhi, Agra, Lahore and Ahmedabad were the important centers for the manufacture of silk. But because of the timidity of Indian markets for silk goods could hardly to expand silk industry under Akbar and silk industry remained a minor industry during the first half of 17th century. Some other important centers of production of silk were Murshidabad, Hugli, Chinsura, Puri, Ghorahat, etc. The *patolas* were manufactured in Gujarat and on the Coromandal coast. In Gujarat, Cambay and Ahmedabad were the main manufacturing centres for this cloth. The *patolas* were used as waist cloths. Silk was also produced at Benaras, Chaul, Thana and Hyderabad. **(map.1)**

Even the Asian market for Bengali silk during this period remained stable. The main consumer of silk stuffs was the Mughal aristocracy. It was during Empress Nur-Jahan, the silk fabrics became popular at the Mughal court.²⁰ The most of the needs of Mughal nobility were satisfied by the import of silk goods to India from Far East, Central Asia, Persia and the eastern Mediterranean countries.²¹

The *karkhanas* of state merchants and nobles were particularly for satisfying the state and their personal needs. These karkhanas worked on the instruction given by the state to governors and Jagirdars.²² Even high skilled artisans were invited from foreign countries during the reign of Jahangir. There were two important branches of

^{16.} Habib Irfan , *Agrarian System of Mughal India* (Asia Publishing House, Bombay 1963), p 52.

¹⁷ Ghose, op. cit., p. 1.

¹⁸ Abu ZakariyaYahya, *Riyaz-us-Salatin*, vol. I tr. into English from Arabic, by S.M Madini Abbasi , New Delhi, 1984, pp. 434-435.

¹⁹ Manrique, Sebastien, *Travels of Fray Sebastien Manrique 1629-1643*,ed. by C. E. Laurd, Oxford, 1927. , pp. 62-63.

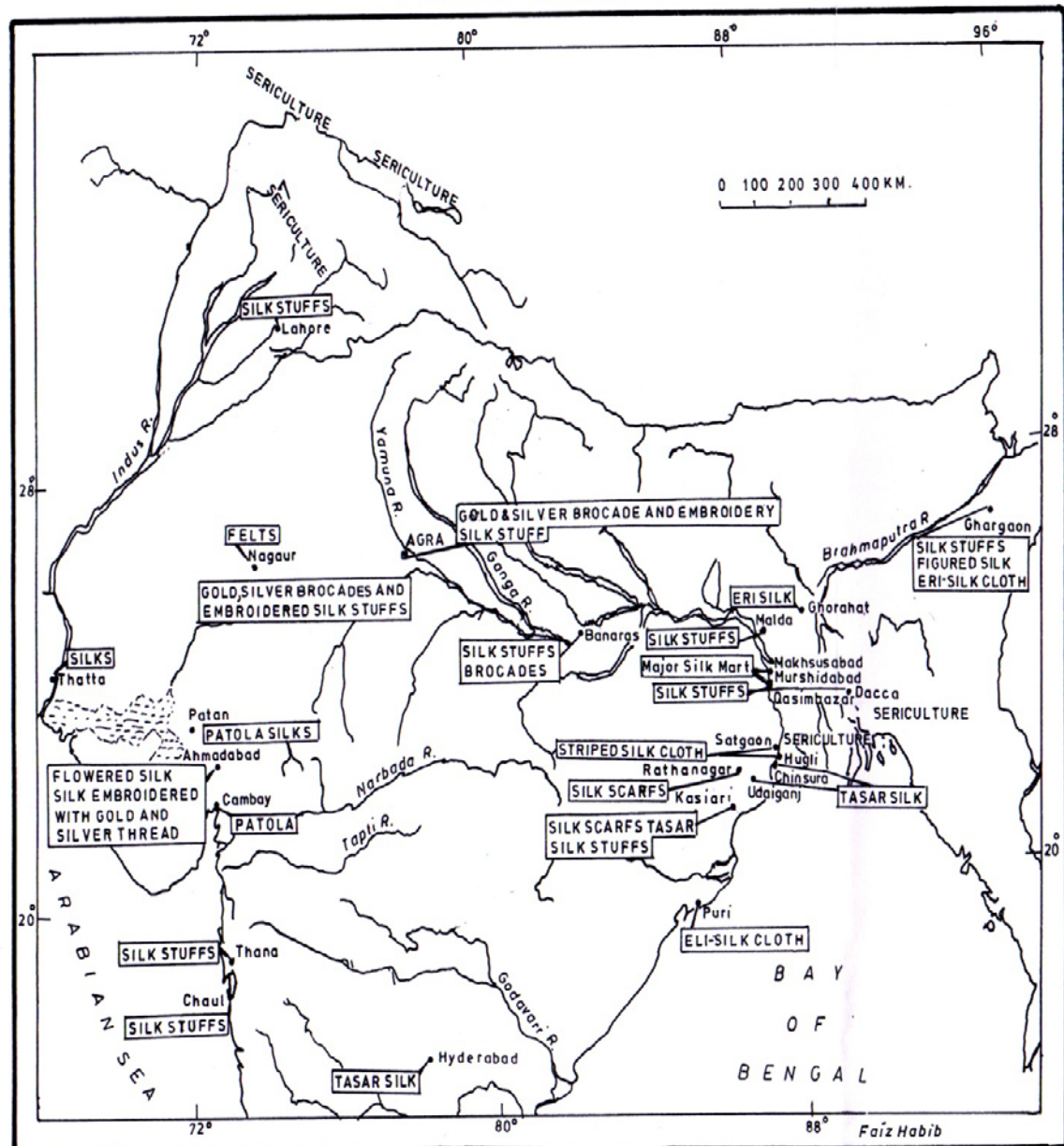
²⁰ Chunder Bholanath, *The Travels of a Hindoo to various parts of Bengal and Upper India*, in 2 volumes, vol. I ,London, 1869, p. 65.

²¹ Moreland, W.H. op. cit. p 160.

²² Verma Tripta , op. cit., p. 16.

silk industry: sericulture and silk weaving. Both of these were managed by the system of advance capital or dadni merchants. The system of growing mulberry plants and working of filature was the responsibility of *dadni* merchant. The merchants were providing both the capital and raw materials to the weavers.²³

SILK PRODUCTION CENTRES DURING MUGHAL EMPIRE 16th AND 17th CENTURY



Map 1

²³ Bhattacharya Sukumar, *The East India Company and the Economy of Bengal from 1704 to 1740*, Calcutta, 1969, pp. 177-178.

The silk worms thrive best in the cold season and hence the November band silk was better in quality and more valuable than any other type. The November and March cocoons were normally put in the sun for five or six days. But the band of July or rainy season were comparatively coarser in quality. Cocoons should be kept in hot water. Approximately 150 mounds of wood were necessary to work of a mound of silk.²⁴

The raw silk was purchased from the mulberry planters in form of “putta” or “short skean” and first wound off from the “bag of the worm”. Its prices varied from 15 to 19 anas per half seer of 70 tolas each. There was better quality of raw silk which was known as Puttany, which cost was about Rs. 5½ to 6½ per seer.

Abul Fazl gives the reference of silk weaving karkhana during the Mughal period.²⁵ The textile industry was so large in volume that Cambay and Bengal supplied cloth to Persia, Tartary, Turkey, Syria, Barbary.²⁶ Gujarat alone was sending coarse cloth to ‘Arabia, Persia, India, Malacas, Sumatra, Malaya, Magadozo and Mambosa.²⁷

The two main cities Gujarat, Ahmadabad and Surat were the main centers of the production of silk. Sericulture of the breeding of the silk worm on the mulberry tree did not practice in Gujarat at any time, as neither the climate nor the soil was favorable for the purpose. That industry was flourished in Bengal. The village of Kasim Bazar was very famous for it, which exported not less than 22000 bales of silk every year. The Dutch generally purchased six to seven thousand bales for exporting it to Holland and to Japan, the similar number of bales was purchased by the merchants of Tartary and of the Mughal Empire bought a similar number of bales for export purposes, and the remaining eight to ten thousand were forwarded to Ahmadabad and Surat.²⁸

²⁴ Shafaat Ahmed Khan, *The East India Trade in the 17th century (in its political and Economic Aspects)* (OUP, 1927), p. 254.

²⁵ *Ain-i-Akbari* by Abul Fazl, tr. By Blochmann, vol. I, Delhi, 2011 (reprint), p. 94.

²⁶ Verthema, Ludovic di Varthema of Balogina, *Travels in Egypt, Syria, Persia, India, Ethiopia*, (1502-8), ed. by G.P. Badger, London, 1862, tr. by John Winter Jones, London, 1928, pp. 107, 111-112.

²⁷ Barbosa, Durate, *The book of Durate Barbosa* (L.M. Dames), London, 1992-93, op. cit., vol. I, p. 154.

²⁸ Tavernier, op. cit., tr. V. Ball, vol. II, pp. 2-3.

Cotton Industries :

Cotton and silk were the main textile crops during the medieval period. Like the cultivation of cotton, cotton weaving was also popular because of the plenty of raw material. This is the reason that textile industry was the dominant industry during the Mughal period. The cotton textile industry contributed a lot to the development of the economy of Mughal Empire.²⁹ The raw cotton of the villages and the weavers of urban areas facilitated the production of cotton textiles. Towns were the main centers for the production of the textile industry.³⁰ The urban weavers utilized the almost all the facilities of the town and because of their long working hours they could work efficiently. Growth of cotton textile industry during the Mughal period was because of the great foreign demand for Indian goods.³¹

The fine quality of *muslin* produced at Dacca was known as *mulmul -i-khas*. Because of its delicacy and fineness it was suitable for royal use. Because of its transparency it seems very gorgeous. The Dacca *muslin* were well known for their delicacy for centuries.³² The fineness of the Dacca muslin is shown from its length and the number of threads in the warp in comparison to its weight. The weight of a 15 yards piece was only 900 grains. It is said that a wet muslin cloth laid on grass was almost invisible, it was just like evening dew known as *shuabnam*. Another was called *ab-i-rawan* or running water which became invisible in water.³³ This fine thread can be spun in a moist atmosphere. Therefore the spinning of *muslin* is required the rainy season.³⁴ Sind and Masulipatnam were the centre where *muslin* was produced. But the main production centres of *muslin* were Dacca.³⁵

Jamdani were very fine textured *muslins* in which floral, animal or bird ornaments are woven on the loom. The warp is as a rule unbleached grey yarn, the motifs being woven in bleached white yarn. The most important centers of *Jamdani*

²⁹ Verma Tripta , op. cit., p. 108.

³⁰ Naqvi, H.K. *Urban Centres and Industries in Upper India (1556-1803)*, Bombay, 1968, pp. 137-42.

³¹ Pelsaert, *Jahangir's India, The Remonstratie of Francois Paelsaert*, edited by W.H. Moreland and P. Geyl, Cambridge, 1925 pp. 2, 9.

³² Chattopadhyay Kamaladevi: *Handicrafts of India*, New Delhi, 1975, p.96.

³³ Ibid., p.31.

³⁴ Ibid., p.5.

³⁵ Chandra Moti, *Costume Textiles Cosmetics and Coiffure in Ancient and Medieval India*, Delhi, 1973, p.126.

weaving in the Gangetic plain were Dacca, Tanda (Fyzabad district, Uttar Pradesh) and Banaras. In Banaras, gold thread is used along with bleached and unbleached white to weave the design since Mughal period. In Dacca, coloured cotton thread is used along with gold and white, but the Tanda cloth, are of finest quality, only white yarn being used in the ornament.³⁶

The main cotton production centers in Northern India were Sialkot where embroidered *muslin* was produced. Chintz and red *muslins* were produced at Sirhind. Saharanpur, Panipat were also the main production centers of muslin. Muslin and Calico were also produced at Agra and Delhi. Mau and Banaras were the production center of *muslin*. In Eastern India calico was produced at Murshidabad and Kasimbazar. Dacca was the main production center of muslin. *Muslin* was also produced at Sonargaon, Soron and Harishpur. In Central India Chanderi was the main production center of *muslin*.³⁷

The art of making *jamdani* designs on fine fabric reached its zenith during the Mughal rule. There were handlooms in almost all villages of the Dacca district, Dacca, Sohargaon, Dhamral, Titabari, Jangalbari and Bajitpur were famous for making superior quality of *Jamdani muslin*. The *jamdani muslin* was manufactured under the monopoly of government and the finest *muslins* were reserved for Bengal Nawabs of Murshidabad. These *muslins* were exclusively produced by the weavers of Dacca. The rest were manufactured at weaver's house. NurJahan also patronized Dacca muslin and made every effort for its promotion and it was made the fashionable dress of the Mughal royalty.³⁸ This high quality of muslins were mainly manufactured for the imperial and native courts of India.

The other important production centers of *muslin* were Ajmer, Cambay, Baroda, Burhanpur, Aurangabad, Paithan. In southeast and south the other important

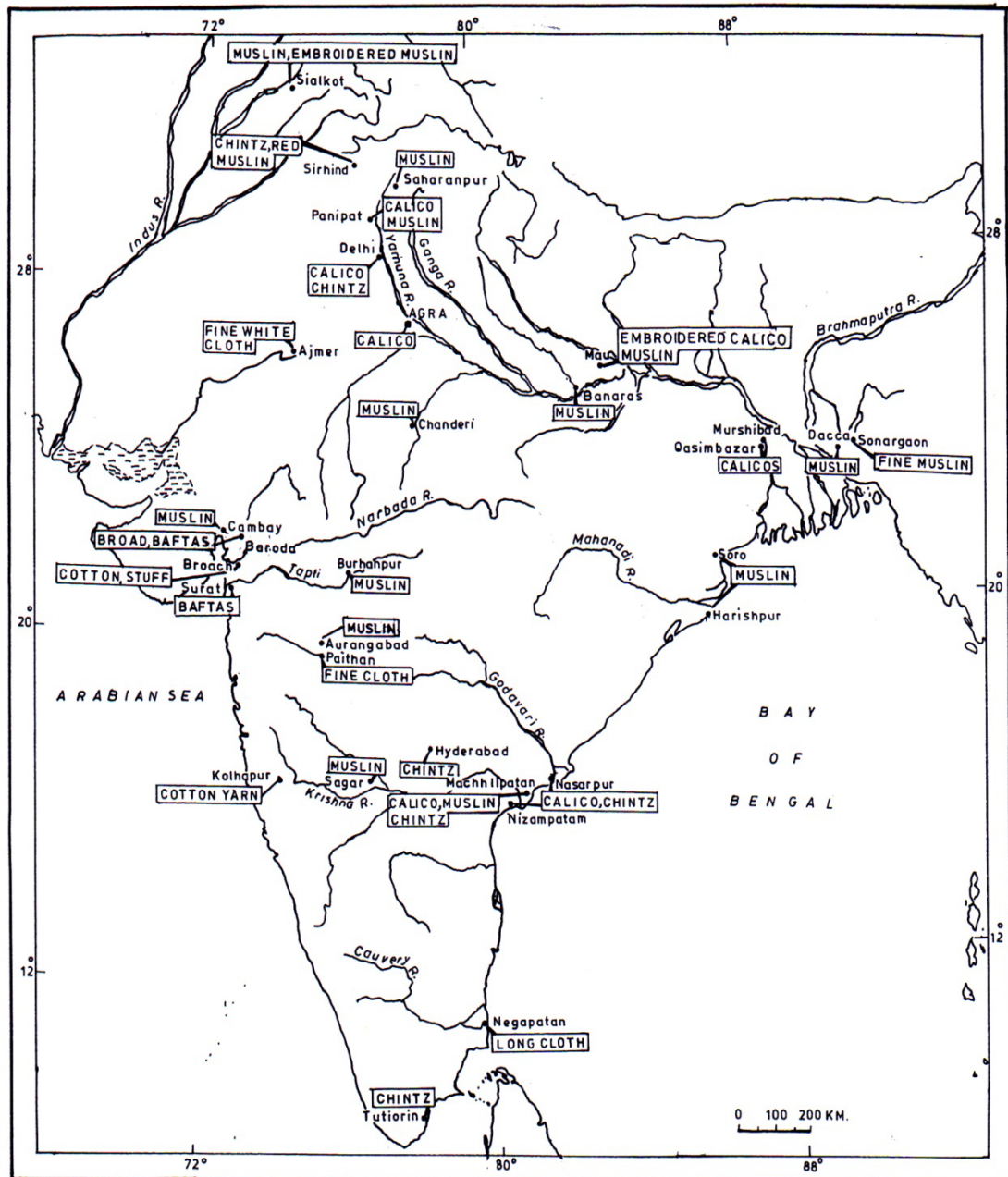
³⁶ Uttar Pradesh district gazetteers. Faizabad, Lucknow: Revenue Dept. District Gazetteers, 196. NOTE: "Cloth printing, *Jamdani*," pp. 146-147; "Handloom weaving yarn spinning by hand, cloth printing, Dyeing," pp. 154-156.

³⁷ See map no. 2, (cotton textile production centres during 16th and 17th centuries), reproduced from Habib Irfan, *An Atlas of the Mughal Empire*, Oxford University press, Delhi, 1982, (Reprint-1986).

³⁸ Bhattacharya S., *The East India Company and the Economy of Bengal from 1704-1740*, Calcutta, 1969, p. 184.

centers of the production of cotton were Sagar, Hyderabad, Masllipatam, Nasarpur. At Nagapatan also the long cloth was produced.³⁹ (map 2)

COTTON PRODUCTION CENTRES DURING MUGHAL EMPIRE 16th AND 17th CENTURY



Map 2

Shawl Karkhanas:

Shawl karkhanas of Kashmir were very famous. The new loom was introduced which contributed a lot for the development of industry. During the reign of Sultan Zain-ul-Abidin twill tapestry technique was introduced. The woollen rug from Kashmir was exported to Persia. The production of Kashmir was in abundance, which monopolized the entire market. Different types of floral designs were woven on the new type of loam. Therefore Walter Lawrence view that shawl weaving technique was introduced in India and then it was entered in Kashmir is not true.

During the Mughal empire, the major development was the needle work embroidery.⁴⁰ There was a big craze of shawls during the Mughal empire. It was a considered the precious gift, which was gifted to the nobles and the foreign rulers⁴¹, because it was considered a sign of prestige.⁴²

During the time of Zain-ul-Abidin Kashmir was famous for manufacture of silk. Different types of wool came from different countries was woven in Kashmir. Sultan Zain-ul-Abidin invited Turkish weavers and the foundation of shawl industry was laid in India.⁴³

Abul Fazl in his Ain-i-Akbari cites a number of textiles. Emperor Akbar took great interest in various stuffs. That's why we find Iranian, European and Mongolian articles of wear, in the country. Because of his interest in textiles e invited a number of artisans and craftsmen from different countries. The karkhanas established at Lahore, Agra, Fatehpur and Ahmedabad were famous for producing excellent products. Multan and Leh were the other important centers of silk production. Lahore was a center of shawl weaving and produced a stuff called *mayan* which was used for turbans and waist-bands. This was undoubtedly luxurious shawl type and was used by aristocratic class.⁴⁴ Srinagar the provincial capital of Kashmir was also a center of shawl weaving industry.⁴⁵ **(map 3)**

⁴⁰ Abdul Hamid Lahori, *Padshah Nama*, ed. by Maulvi Kabiruddin and Maulvi Abdur Rhim, Bib. Indica, Calcutta, 1866-67. Vol. II, p. 404.

⁴¹ *Tuzuk-i-Jahangiri* tr. By A. Rogers and H. Beveridge, vol.1, London, 1909-14, p 146.

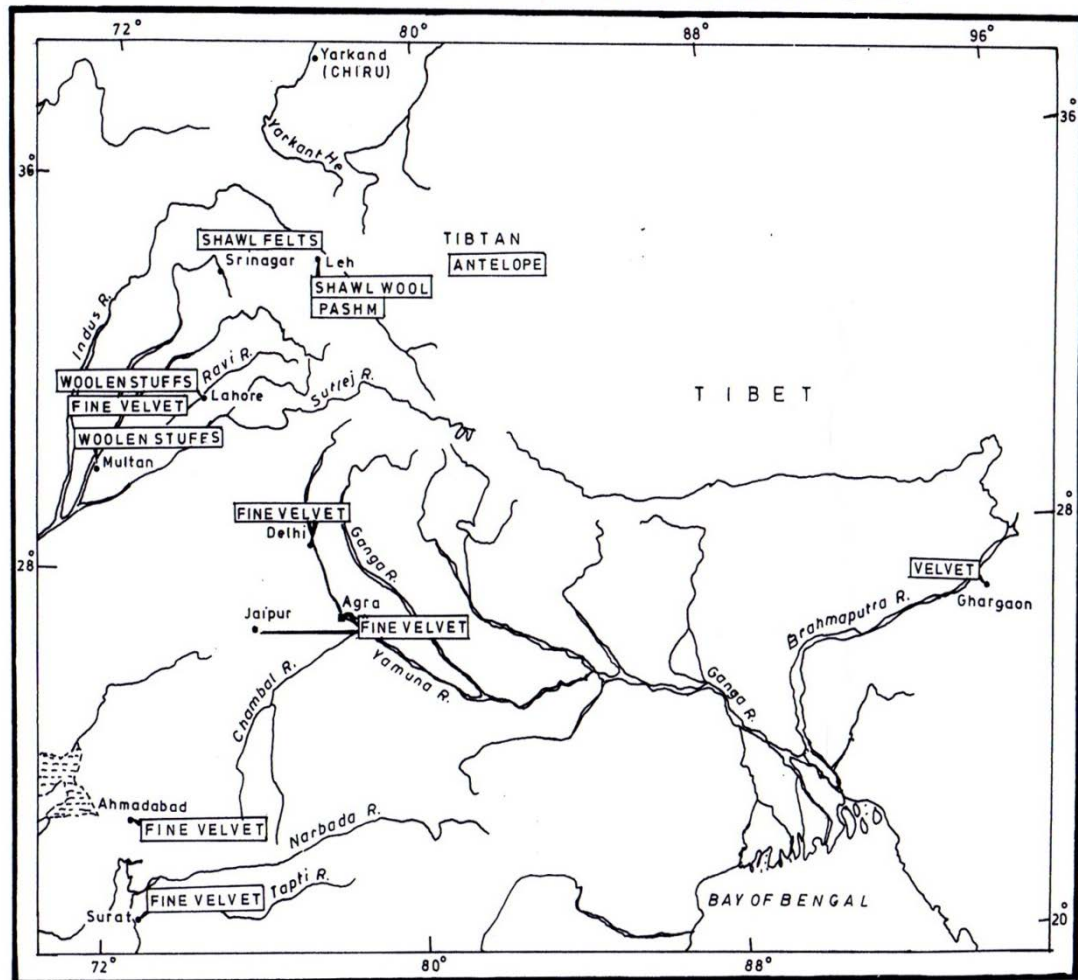
⁴² Bernier, op. cit. pp. 402-03.

⁴³ Verma Tripta, op. cit p 68.

⁴⁴ Verma Tripta, op. cit., p. 70.

⁴⁵ Ibid.

WOOL AND VELVET PRODUCTION CENTRES DURING MUGHAL EMPIRE 16th AND 17th CENTURY



Map 3

Shawls were never produced in India to a great extent. The origin of Kashmiri shawls can be traced back to pre-Mughal period. In India shawl was used as personal wear as it is used today round the shoulders or over the head.⁴⁶ John Irwin noticed the writings of Pietro Della Valle where he cited that in Persia shawl was used as girdle whereas in India it was used across the shoulder⁴⁷. Even today, some priests of the Parsis, descendants of Iranians are draping woollen shawl round the waist, for ceremonial purposes.⁴⁸

⁴⁶ Irwin John; *Shawls*, A Study in Indo-European influence, London, 1955, p.2.

⁴⁷ Della Valle Pietro, *The Travels of Pietro Della Valle*, Hakluyt Society, vol-2, London, 1892, p.248

⁴⁸ Dhar S.N., *Costumes of India and Pakistan*, 1969.

Kashmir was the main center of production of shawls in India. The foundation of Kashmir shawl industry was laid by Zain-ul-Abidin, whom historians called “Akbar of Kashmir”.⁴⁹ The best quality of shawls was produced in Kashmir were the “ring shawl”. These shawls were name as ‘ring shawl’ because when there are completely folded it can be passed through a men’s signet ring.⁵⁰ Another famous Kashmiri shawl is soberly colored and delicately embroidered which represents the conventional Persian and Cashmere wilderness of flowers with birds.

Emperor Akbar was very fond of wearing shawls He himself introduced a new fashion of wearing shawls, which was sown back to back in which under surface of the shawl was never seen, popularly known as doshala. But during the time of Mughal the shawls which were in vogue were embroidered with gold and silver. The majority of best quality of shawls was made of Pashmina.

The two main types of Kashmiri shawls as the *do-sala* (twin-shawls) and the Chaddar-rumal or kasaba. As it name denotes that it is always sold in pairs.⁵¹ The kasaba shawls are squarish in shape. They are generally in twill weave or may have damark pattern in a plain colour woven into them. The colours of Kashmiri shawls are yellow (zard), white (sufed), black (mushki), blue (ferozi), green (zingari), purple (uda), crimon (gulnar), and scarlet (Kimiz).⁵² The motifs of the shawls are the imitation Nature – the leaf of the Chenar tree, apple blossoms, the almond, the tulip and sometime the fruits of the region were remained the main motifs of the shawls of Kashmir.⁵³

The mode of shawl weaving is popularly known as the twill-tapestry technique which is similar to that of tapestry weaving in the west. The pattern of the shawls were produced on fabrics by means of smooth, light, wooden spools known a Tojlis, without the use of a shuttle⁵⁴The designs on the shawls are formed by the weft threads. The designs are woven back and forth round the threads of the warp wherever

⁴⁹ Irwin John. op. cit.

⁵⁰ Manucci, *Storia the Mogour* (1653-1708); tr. William Irvine, vol.2, Delhi, 2010.(reprint) p.341.

⁵¹ Irwin John, op .cit.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

each colour is required. The loom used by the Kashmir weavers is horizontal, unlike those used for tapestry weaving in Europe.⁵⁵

The twill-tapestry technique is very time-taking. It requires a high degree of specialization of weaving technique. Before weaving the six other specialists take part in the preliminary process: the warp maker, the warp dresser, warp threader. The pattern drawer, the color caller, the pattern master.

The *Jamaivar* shawls of Kashmir were also very famous, which is very famous and loom-designed brocaded woolen-fabric. The *Jamaivar* shawls are of fixed length and is woven completely with wool or sometimes mixed with cotton, but the floral designs, but the floral designs and brocaded parts are in silk or Pashmina wool.⁵⁶ So many brocade designs are found in these shawls but the dominant are the large flower sprays (*Kirkha Butis* and the small flowers or *Rega butis*).⁵⁷

The Shawl karkhana of Kashmir was very famous. The twill tapestry technique was introduced by Sultan Zain-ul-Abidin. The introduction of new loom contributed a lot to the development of shawl industry. In Kashmir the production was on such a large scale that it monopolized the market. A number of plants and flowers were woven during this period. Woolen rug *Pattu* was exported to Persia.⁵⁸ Therefore the view of Walter Lawrence that the shawl weaving technique was introduced by Babur in India then it came to Kashmir is not true.

During the Mughals there was a big craze for Kashmiri shawls, it was considered a sign of prestige.⁵⁹ On different occasions it was gifted to the nobles of different ranks and to foreign rulers.⁶⁰ *Ain-i-Akbari* of Abul Fazl throws light on the manufacture of Kashmiri shawls during 16th century. Akbar was very fond of adopting the new style of wearing, this is the reason that a number of European, Iranian and Mongolian articles of wear were available in his wardrobe.⁶¹ He himself

⁵⁵ Ibid.

⁵⁶ Mehta Rustam J., *The Handicrafts and Industrial Arts of India*, Bombay, 1960 ,p.15

⁵⁷ Ibid., p. 17.

⁵⁸ Abdul Hamid Lahori, *Padshah Nama*, op. cit. Vol. II p 404.

⁵⁹ Bernier op. cit. ,pp 402-03.

⁶⁰ *Tuzuk-i-Jahangiri* (tr.), p. 146.

⁶¹ *Ain*, vol. I, op. cit. p. 98.

took interest in the development of textile industry. The imperial karkhanas of Agra, Lahore, Fatehpur and Ahmadabad were famous for the excellence of their products.⁶²

With the textile industry Akbar also patronized the shawl industry of Kashmir. In Ain 31 to the Sal, Akbar renamed as Param Naram, which means very soft.⁶³

The production of shawls during the Mughal period was on a large and very large scale. In Lahore itself there were more than thousand workshops of Shawls. A kind of shawl, called *mayan* was chiefly woven there; and it consisted of silk and wool mixed, and was used for *chiras* (turbans), *fotas* (lion cloth) etc.⁶⁴ Tus shawl was made from the hair of Tus goat.⁶⁵ Patterned and corded or taran shawls were made of either white, black or mixed wool. During Akbar's time the white kind of shawl was dyed in the number of colors. Different varieties of shawls were famous during the Mughal period i.e. Kalabattu⁶⁶, this design was brocaded with gold wire, Zardozi, was embroidered with gold wire, Qasidah, the pattern in this was too embroidered not woven. Qalghai, was made either of silk or gold wire. Bandhnun⁶⁷ shawl was tie-dyed pattern. Chint shawl was painted or decorated with floral patterns. According to Jarret Purzdar is a sort of stuff of which the outside is plush-like.

Women were the main spinners, they were working in their homes. The raw material was given to them in a very bad condition, their first task was to separate it into fine fleece, inferior fleece and hair. The ratio of fine fleece was only about one third of the total fleece, and this is further divided into two grades, the one is very fine and other is known as phiri, which is of inferior quality. The yarns were spun lengthwise and their length was about 2500 yards and then doubled and twisted. For this work spinners were getting about one and a half annas a day.

The dyers were coming under a separate group. During the Mughal period more than three hundred tints were in use. Most of these were vegetable dyes blues and purples from indigo, orange and yellow from carthamus and saffron, red mainly

⁶² Ibid.

⁶³ Ibid..

⁶⁴ Ibid.

⁶⁵ Chandra Moti, *Costumes, Textiles, Cosmetics and Coiffure in Ancient and medieval India*, 1973, p. 239.

⁶⁶ Tripta Verma, op. cit., p 70.

⁶⁷ Ibid.

from logwood. Dyes from other sources were cochineal for crimson, iron filings for black. Imported English baizes were used for green. At least six specialists weavers were involved in this weaving process. They were warp-maker, warp-dresser, warp-threader, pattern-drawer, color-caller and pattern-master.

The warp-maker was twisting the yarn into the required thickness for the warp. The task of warp-dresser was to starch the warp and the task of warp-dresser was to pass the yarn through the heddles of the loom.⁶⁸ The weavers were mostly poor as they were. The pattern-dyers or naqqash were getting higher salaries.⁶⁹ The weaver were all men and the owner of loom was known as ustad. There were two types of contracts between the owner of the loom and those who worked his looms. The first type of contracts was based on piecework in which the weavers receive a fixed for every hundred spools passed round as many warps. The second type was based on a partnership where the loom owner provides the loom and raw materials and took one fifth of the net sale.

The spools or *tojlis* used in place of shuttles were made of light and smooth woods. In the beginning of the process of weaving the cloth was faced downward and the spool was inserted by the weaver from the reverse side. When every line of the weft was completed the comb was brought down with a repetition of stroke. The quality and standard of the weaving was determined by counting the number of comb-stroke or wefts to the *girah* (one sixteenth of a yard).⁷⁰ The main profit makers were not loom owners but the shawl-brokers, who were the intermediaries between the producers and the English merchants. Therefore there emerged a class of loom owners known as karkhanadars and their head was known as ustad.⁷¹

The weavers exploited by the karkhanadars. The karkhanadars employed artisans and paid them in cash. The artisans paid them in cash and the art went down from father to son. The imperial court was the main consumer of these shawls and the transactions worth lakhs of rupees were done at the Imperial camp. In spite of the well established industry during the Mughals, the condition of weavers was not good

⁶⁸ Irwin John, op. cit., p. 7.

⁶⁹ Ibid.

⁷⁰ Ibid., p.16

⁷¹ Irwin John; op. cit. ,p.8.

because of the exploitation by the karkhanadars. The wage of women and children were very low.

With the expansion of the Mughal empire new centers were opened for the shawl trade. ShahJahan sent a large number of Kashmir shawls to the rulers of Golconda and Bijapur. During this period shawls were sent to the Ottoman empire, Persia and Egypt. Lahore⁷², Ahmadabad⁷³, Gujarat⁷⁴, Agra and southern India emerged as main marketing center of Kashmiri shawls⁷⁵ within India.

The Extent of Mughal *Karkhanas*:

Abul Fazl mentions the following karkhana in his Ain-i-Akbari; the treasuries, the mint, the Farrash khana, illumination and lights, the workshops for making the royal seals, the abdarkhana (for water), the kitchen, mevakhana (the fruitery), khushbukhana (the perfumery), the wardrobe and the bedding and mattresses, the workshops for manufacture of shawls and textiles, kurkyaraqkhana and tosh khana (for dresses and different types of stuff used for weaving apparel etc.).⁷⁶

It was during the time of Akbar when much attention was paid towards the development of Karkhanas. Though importation of the stuffs was high during the Mughals from Iran and Europe. But various efforts were also done to produce stuffs indigenously. During Akbar skilful masters and workmen were employed to teach people an improved system of manufacture. Imperial workshops were established at different places like Lahore, Agra, Fatehpur Sikri and Ahmedabad. The products produced in those workshops were very fine and their patterns, figures and variety attracted the foreign travellers. The royal patronage to the workmanship led to the development of these karkhanas. In these workshops all kinds of hair weaving and silk spinning was done.

During Mughals royal karkhanas were scattered all over India. The main centres of karkhanas were Kashmir, Lahore, Agra, Ahmadabad, Fatehpur and Burhanpur. Kashmir workshop was very famous among all.⁷⁷ Its palkis, inkstands, trunks, bed sheets, boxes and spoons were used all over India. But its shawls were

⁷² Manucci, II, op. cit. p. 328,

⁷³ Palsaert, op. cit., p. 19.

⁷⁴ Ibid.

⁷⁵ Verma Tripta, op. cit., p. 123.

⁷⁶ Ibid. p. 23

⁷⁷ Ibid, p. 25

very famous. In Agra, Patna and Lahore similar shawls were manufactured but these shawls could not reach the fineness of Kashmir shawls.⁷⁸

A number of industries were flourished at Lahore. Silken, woollen, cotton and mixed goods both plain and flowered were produced there. Lahore was the main centre where art and craft was practiced.⁷⁹ It was the main centre of producing shawls. There were more than thousand workshops of shawls in Lahore. A kind of shawl called mayan was chiefly woven there, which consisted of silk and wool mixed. But it was not a regular shawl, because it was used for chiras (turbans) and fotas (lion bands) etc.⁸⁰ Silk industry was also flourished there, which produced brocades and velvets and were on sale in Agra.⁸¹ Sialkot, Bajwara and Sultanpur were also famous for embroidery.⁸²

Gujarat was famous not only for the fertility of soil but also for the manufacture of silk and brocades, as cited by Ali Muhammad Khan in his *Mirat-i-Ahmadi*⁸³ city of Ahmadabad was very famous for the karkhanas producing velvet embroidered with gold and silver.⁸⁴

In *Ain-i-Akbari*, Abul Fazl described that there were a number of workshops established in Agra. The most famous was the weavers' shops where the all sorts of textiles were produced. Among the Mughals Akbar had keen interest in developing the karkhanas. He had a mechanical turn of mind. During the reign of Akbar a number of fine textiles were manufactured at Agra and Fatehpur Sikri, good cotton cloth at Patan in Gujarat and at Bahrapur in Khandesh while Sonargaon was famous for its fine fabrics, the best and finest clothes made of cotton all over India.⁸⁵

Administration of the Mughal Karkhanas:

The Mughal Emperors were maintaining their karkhanas themselves, for the manufacture of different goods i.e. the articles of cotton and silk. The karkhanas were

⁷⁸ Ibid. p. 25.

⁷⁹ Monserrate, *The Commentary of his Journey to the Court of Akbar*, tr. J.S. Hoyland, London, 1922, p. 160.

⁸⁰ *Ain-i-Akbari*, vol. 1, op. cit., p. 98.

⁸¹ Verma Tripta, op. cit, p. 27.

⁸² Ibid.

⁸³ Ali Muhammad Khan, *Mirat-i-Ahamadi*, tr. M.F. Lokhanwala, Oriental Institute, Baroda, 1930, vol. I, p. 352.

⁸⁴ Verma, Tripta op. cit. p. 27.

⁸⁵ Ibid. p.48.

established within the boundaries of the wall of the fort.⁸⁶ During the Mughal period the advancement took place in each and every department of the state. Babur did not have time to the industrial development yet he established public works department or Shuhrat-i-Am.⁸⁷

Humayun too would not do any remarkable work for the development of karkhanas because of the political disturbance. Because of the political stability and extent of the Mughal Empire during the reign of Akbar, major industrial developments took place which is clear through the words of Abul Fazl. He said that Akbar paid much attention to various stuffs, skilful masters and workmen have settled in this country to teach people an improved system of manufacture. His majesty himself acquired in a short time a theoretical and practical knowledge of the whole trade, and on account of the case bestowed upon them the intelligent workmen of this country soon improved.⁸⁸ According to Abul Fazl about hundred workshops were there under Akbar, which were coming under Diwan-i-Buyutat⁸⁹. Father Monserrate, an eyewitness, writes that Akbar did not shrink from the craft of any ordinary artisan. Nor does he shrink from watching and himself practising for the sake of amusement the craft of any ordinary artisan.⁹⁰ In the karkhanas for cotton weaving, dyeing and printing, silk and shawl manufacture, Akbar is said to have introduced new designs or varieties but even acquired 'theoretical and practical knowledge' in some of the trades.⁹¹

During the reign of Jahangir also karkhanas flourished a lot. According to Bernier during 17th century in karkhanas skilled workers were employed by the state. During the reigns of Jahangir and ShahJahan the art and crafts industries were as developed as never before during the Muslim period.⁹² Sir Thomas Roe has appreciated the Indian artisans of Jahangir's reign for their perfection. Bernier, who visited India during the reign of Shahjahan and Aurangzeb was also impressed by the

⁸⁶ Ibid. p.38.

⁸⁴ Ibid. p.39

⁸⁸ *Ain-i-Akbari* (tr.), op .cit. vol. I, pp. 93-94.

⁸⁹ Verma Tripta p. 48.

⁹⁰ Ibid.

⁹¹ Monserrate, op. cit., p. 201.

⁹² Verma Tripta , op. cit., p. 41.

industrial advancement of India i.e. the shawls manufactured in Kashmir Agra, Patna and Lahore reached at its apex of fineness.⁹³

During the reign of Aurangzeb, the disintegration of Mughal Empire took place. It was the time of setback in each and every aspect of life. It adversely affected the growth of industries. It is suggested that he hated the luxuries, but it is not completely true. The continuous wars were led to the exhaustion of the resources. During the later Mughals also the position could not improve.⁹⁴

Under the Mughals the administration of karkhanas was very well organised. Khan-i-Saman was the head of the whole of the household department. In *Ain-i-Akbari* we don't find the term Mir-i-Saman.⁹⁵ In *Akbar Nama* we find a reference of Mir-i-Saman, but his powers and duties are not mentioned there.⁹⁶ The term Khan-i-Saman was in use during 15th century whereas during 17th century the term Mir-i-Saman was in use during the reign of Jahangir. During the 15th year of the reign of Jahangir, the term Khan-i-Saman was in use, when Mir Jumla was appointed to the post of Khidmat-i-Samani and during the 21st year of his reign the term Mir-i-Saman was again used.⁹⁷ According to *Dastur-ul-Amals* of Aurangzeb's period, the term Khan-i-Saman was predominant.⁹⁸

Khan-i-Saman was under working just below the post of Diwan. He was mainly the Diwan of expenditure.⁹⁹ The duties of Khan-i-Saman are well described in the *Dastur*:

- He was responsible for attestation of the salary bills as well as for increments in the salary.
- The appointment, dismissal and posting of Daroghas, amins, mushrifs and tahvildar, of the various karkhanas.
- Setting up of the rules and regulations for the karkhanas and treasuries.
- Considering applications from the workshops and stores.

⁹³ Bernier, *Travels in the Mughal Court* tr. Constable and Smith, Oxford, 1934, vol. I, pp. 402-04.

⁹⁴ Verma Tripta, op. cit., p. 42.

⁹⁵ *Ain-i-Akbari* (tr.), op. cit., vol. I, p. 417.

⁹⁶ Abul Fazl, *Akbar Nama* (tr. By H. Beveridge), Delhi, 1972, vol. III, p. 877.

⁹⁷ *Tuzuk-i-Jahangiri*, op. cit. vol. I, p. 412.

⁹⁸ *Dastur-ul-Amal-i-Aurangzeb*, MS (British Museum, now British Library, London), Add 6599, f.58.

⁹⁹ Sarkar Jadunath, op. cit., p. 32.

- Nazar, charity-funds and presents
- Permits for the loan of articles from the karkhanas.¹⁰⁰
- Attestation of the attendance of the daroghas, amins, mushrifs and tahvildars of karkhanas.
- Long sheets of letters from the karkhanas
- Arrangements for the marriages of the princes.¹⁰¹
- Escheat of property. If the order is restore, then send a copy of the order to the office (of the Diwan), so that his tanka may be paid according to it.¹⁰²
- Khan-i-Saman was responsible for manufacture, supply and for their stock also. He made the arrangement for the orders of the emperor.¹⁰³

Mir-i-Saman was also under the control of Diwan. He was responsible for the proper administration of the internal finances of the buyutat. Mir-i-Saman also made out the estimates of the expenditure twice a year and obtained the sanction from the wazir and the monarch.¹⁰⁴

All important papers were required to be countersigned by the Mir-i-Saman. He was solely responsible to deal with state cases connected with property under the control of the department. Both under Jahangir and ShahJahan's the Mir-i-Saman occupied a higher status and enjoyed a much higher rank than the Diwan of their department.

The management of Buyutat was done with the various offices and their departments. There was a Darogah or a superintendent, assisted by clerks and accountants at the head of every karkhana.¹⁰⁵ Other important officers were Tahsildar (cashier and store keeper), Mustauf-i (Auditor) etc. But at the apex remained the king. His duties did not end with the sanction of grants and the inspection of the financial statement every sixth month. The Mir-i-Saman and the Diwan presented themselves in the Darbar every day, like other heads of departments, and represented important

¹⁰⁰ Verma Tripta , p. 46.

¹⁰¹ Ibid . p.47.

¹⁰² Ibid., p. 47.

¹⁰³ Ibid., p. 47.

¹⁰⁴ Qureshi I.H. , *Administration of the Mughal Empire*, Karachi, 1966 p. 76.

¹⁰⁵ Verma Tripta, 50.

cases connected with their duties.¹⁰⁶ Some of the manufactured goods were presented in the court before the king including the artisans if their work was remarkable.¹⁰⁷ Thus it was the complete management of the karkhanas under the Mughals.

Nature of *Karkhanas* under the Mughals:

The main purpose of the state Karkhanas was to provide the encouragement for the workers to improve their skills. The major factor that was enforcing the workers to secure job in the state karkhanas was that the state was providing much security to their job.¹⁰⁸ The workers during the medieval period were not willing to work for any private organization because there were not any rules to regulate these private organizations, or no private organization was available during the medieval period which could provide the security to the workers.¹⁰⁹ If any noblemen wanted the service of any artisan, he called him forcefully and after taking his service, he was not providing their reasonable wages to them. Therefore the artisans found themselves safe under the state karkhanas.¹¹⁰

Abul Fazl gives information that Akbar invited a number of master craftsmen from far and wide places and settle them in the cities of northern India.¹¹¹ Father Monserrate gives the reference of the encouragement of artisans under the patronage of emperor Akbar. Similarly during the reign of Jahangir and ShahJahan the patronage to the artisans continued.¹¹² Only those artisans were appointed to the court Karkhanas, who were highly skilled and from different part of the countries they were sent to the capital where these skilled artisans were working under the guidance of experts. Pelsaert talks about prince Khurram, 'He was a patron of all craftsmen to whom he paid such high wages that he attracted all the splendor of his father's court.'¹¹³ Pelsaert again says that the workmen of Agra followed hereditary occupations.

Therefore a number of artisans were working in royal karkhanas. Others were working to private orders with the raw material given to them. The establishment of

¹⁰⁶ *Dastur-ul-Amal-i-Agahi*, Br.Mu.Add.1881, f. 36a, etc.

¹⁰⁷ *Dastur-ul-Amal-i-Aurangzeb*, Add.6598, f. 33, Clause 1.

¹⁰⁸ Verma Tripta, p. 122.

¹⁰⁹ Ibid.

¹¹⁰ Ibid., p. 124.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Pelsaert, op. cit., p. 37.

state Karkhanas led to the transfer of workers from villages to towns.¹¹⁴ Thus the technically able artisans were drawn from villages to town either voluntarily or forcibly. The highly specialized artisans acquired their own status.¹¹⁵ Bernier said that the son of an embroiderer brought up as an embroiderer, son of goldsmith brought up as goldsmith and the son of a physician was brought up as a physician.¹¹⁶

Bernier gives us the information that the exploitation of peasants in villages led to their migration to towns. Aurangzeb's revenue policy affected a number of peasant and they migrated to towns. Similarly Moreland informs that the main increase in the amount of labour was the main economic fact of Akbar's age.¹¹⁷

The caste organizations of the artisans, were formed to fight against the feudal system where the nobles were exploiting the artisans. The noble class which was controlling the state machine, was exploiting the peasants in form of taxation system.¹¹⁸ The system of monopolies also encouraged the exploitation of artisans, for example on the purchase and production of certain goods like dyes, saltpetre there was the monopoly of state, which led to the oppression of artisans in many ways. Because of the monopoly, these nobles were the main consumers of the goods made by artisans, and special decrees fixed the prices of various goods and the labour of the artisans.¹¹⁹

Francois Bernier gives us an important information about the Indian workshops and Karkhanas during the Mughal period. He says that Indian workshops were consisted of the skilful artisans and he praised their workmen ship. He states that there are so many instances of handsome pieces of workmanship made by the persons destitute of tools, and who can scarcely be said to have received instruction from a master. Sometimes they imitate so perfectly the articles of European manufacture that the difference between the original and the copy can hardly be discerned".¹²⁰

Bernier also highlighted the pathetic conditions of the Indian artisans. He said that "if the artists and manufactures were encouraged, the useful and fine arts would

¹¹⁴ Verma Tripta , op. cit., p 125.

¹¹⁵ Ibid.

¹¹⁶ Bernier, op. cit., p 259.

¹¹⁷ Moreland W.H. , op. cit, p. 87.

¹¹⁸ Verma Tripta , op. cit., p. 128.

¹¹⁹ Ibid.

¹²⁰ Bernier, Travels , op. cit. pp. 256-259.

flourish; but these unhappy men are condemned, treated with harshness and inadequately remunerated for their labour”.¹²¹

Bernier also gave information about the karkhanas or workshops for the artisans.¹²² There were separated halls for different types of work. Different kinds of work were done in separate halls.

Bernier was a French traveller and in France the slavery was practiced and social differences pronounced. He was confused about India's complex caste system which divided people by birth and traditional occupation.¹²³ Bernier talked about the prevalence of caste system in India. He stated that the son of embroiderer brought up as an embroiderer, and the son of a goldsmith was brought up as a goldsmith.¹²⁴

There were several types of karkhanas during the Mughal period like manufactory, storehouse and repair workshop. These karkhanas were under the control of emperors, members of royal family, nobles and merchants. But we don't have much information about the karkhanas maintained by the nobles and merchants, we have appropriate information only about the royal karkhanas which is given in Bernier and Abu'l Fazl.¹²⁵

The demands of the Mughal royalty were satisfied by these karkhanas, which were managed by the emperors and nobles at different places. These karkhanas were manufacturing a number of items like clothes, robes, utensils arms etc. The craftsmen of these karkhanas were working under the control of malik, who was under the control of State General Superintendent of Arts and Crafts.¹²⁶ These Mughal karkhanas were placed at Dacca, Sonargaon, Junglebare, Bazetpore for the manufacture of the malboos khass muslin for the royal wardrobe of Delhi. These karkhanas were under the direct control of Darogah, who controlled all craftsmen employed here.¹²⁷ The main duty of Darogah was to control the manufacture of cloth production and to maintain the quality of cloths. Expert weavers were employed to

¹²¹ Ibid. pp. 228-229.

¹²² Ibid. p. 258.

¹²³ Fisher Michael H., *Beyond the three seas: Travellers' Tale of Mughal India* (New Delhi: Random House, 2007, p. 5.

¹²⁴ op. cit., p. 259.

¹²⁵ Abu'l Fazl, *A'in*, vol. I, op. cit. 115-6, 272 etc; F. Bernier *Travels in Mughal Empire*, AD 1656-68 (trans.), A. Constable, pp. 258-259.

¹²⁶ Bernier, *Travels in India*, vol.1, op. cit. p 259.

¹²⁷ Taylor James, *A Descriptive and Historical Account of the cotton Manufacture of Deccan in Bengal*, London, 1851, p. 82.

maintain the quality of the cloth produced. The working hours of weavers were fixed. Mukeems or inspectors were employed to control the whole process of weaving. These imperial regulations were facilitated by the production of superfine muslins.¹²⁸ These regulations contributed to the production of fine Muslin. Several guards were appointed to check the weavers act.

Except state karkhanas, the royal families were also having their own karkhanas. Shahjahan, Aurangzeb, Dara Shikoh and Jahan Ara Begum etc. were maintaining their own Karkhana.¹²⁹ According to the contemporary sources the scarcity of the skilled artisans was a setback to the output of the royal karkhanas, and state karkhanas coming to the reign of Aurangzeb the creativity of the artisans was lost.

Very few information are available about the karkhanas maintained by the nobles. Almost every major Mughal city had its own karkhanas and were producing different type of products .Every noble's karkhana was under the control of a Darogah and other important officials of noble's karkhanas were tahvildar, mushrifs, the shahs and bhayyas.

The nobles' *karkhanas* were divided into two general and specialized karkhanas. Regional variations are very well found in the nature of the organization of the Mughal's noble's karkhanas. In case of Amber thirty six different kinds of karkhanas were there. The local and regional specialized workforce was utilized there. The worker's wages were decided on the basis of nature of their work, and the prices of the commodities. The growth imperial household is increased by the consumption of fine clothes of gold and brocades, silks and embroideries.¹³⁰

The royal *karkhanas* were under the control of feudatories. In royal karkhanas highly skilled artisans were preferred. The flexibility of supply was not there because of the constant demand of aristocratic class. The contemporary technological changes were not so much entertained by the artisans of the karkhanas that's why the qualitative change was not possible there.¹³¹

¹²⁸ Ibid, p 82.

¹²⁹ Ali M. Athar , *The Mughal Nobility under Aurangzeb* (Delhi, 1968), p. 158.

¹³⁰ Chaudhuri, T.R. , *Bengal Under Akbar and Jahangir*, Calcutta, 1953, pp. 266-267.

¹³¹ Sangwan Satpal, *Science, Technology and Colonialism: An Indian Experience, 1757-1857* (Delhi, 1991), pp 12-14.

During the reign of Aurangzeb these karkhanas began to decline. Because Aurangzeb was a puritan Mughal, the Mughal court karkhanas at Lahore, Ara and other cities declined considerably. During the reign of Aurangzeb the artisans began to return to their towns and villages¹³² and there the new generation of Indian weavers became ustads themselves. These ustads in their villages established new karkhanas. Because of the easier, cheaper and local availability of raw materials, labour and communication the production was increased to a great extent.

The Mughal state established the karkhanas on a large scale which provided employment to a number of artisans and there were enormous future opportunities for the artisans and craftsmen. The emperors were instructing the provincial governors for appointment the best artisans and workers from the different parts of the country.¹³³ Even foreign workers were invited by Jahangir from Turkey, Persia, China and European countries.¹³⁴ The raw material for these karkhanas was not brought by the artisans through open purchase but it was provided through monopoly purchases by the state. The workers and artisans were not working freely like implementing their own designs but they were working on the instruction of the state officials according to the desire of the elites. The articles made in state karkhanas were not for sale in the market but was for the use of elite and aristocratic class.¹³⁵

The term Buyutat was used by the Mughals for karkhanas. Not only in the Imperial Household but also the military and fiscal set-up of the empire, these karkhanas played an important role. The entire organisation was coming under the supervision of Diwan.¹³⁶ The Mughal emperor's were keenly interested in the development of karkhanas not only in the capital but also in the provincial headquarters too. Under the Mughals the Karkhanas were not only established to meet the general demands but to meet the demands of choice of the elite class.¹³⁷ The functions of karkhanas were not limited they were dealing with the each and every aspect of life of elite class, like the food served on the monarch's table to the clothes they wore and the arms and ammunitions they used. So many factories and offices

¹³² Haris Jennifer, ed. 5000 years of Textiles (London, 1993), p. 111.

¹³³ Raychaudhuri Tapan and Habib Irfan, ed. *The Cambridge Economic History of India*, vol. I, Delhi, 1982, pp. 286-87.

¹³⁴ *Tuzuk-i- Jahangiri* (tr.), op. cit., vol. I, p. 215.

¹³⁵ Verma Tripta, op. cit. p. 16.

¹³⁶ *Ain-i- Akbari*, vol. I, op. cit. p. 4.

¹³⁷ Verma Tripta, op. cit., p 17.

were coming under the imperial household.¹³⁸ The standard and the amount of the articles used at the Mughal court was so high that no private agency could meet this.¹³⁹

Abul Fazl said there were more than hundred karkhanas. They all were paid full attention by the emperor Akbar.¹⁴⁰ These karkhanas were placed in large halls at palace. According to Bernier within the fortress there were so many large halls. In one of them embroiders were busy in their work, in other hall were the manufacturers of silk brocade and fine muslins of which are made turbans, girdles etc. The son of an embroiderer was brought up as embroiderer the son of a goldsmith became a goldsmith. The development of Indian art industries under state patronage is well described by Abul Fazl, 'His Majesty pays much more attention in various stuffs, hence Irani, European and Mongolian articles of wear are in abundance.'¹⁴¹

Court historians like Abul Fazl and European travellers like Francois Bernier and Pelsaert have written a lot about medieval Indian urban crafts. Abul Fazl mentions the 'guilds of artifices' and gild masters, who were appointed by the town administrator. These guilds were working under karkhanas. There developed a hierarchy of karkhanas owned by courtiers. The main features of karkhanas under the Mughals were that culture of collective work in urban north India was started by these karkhanas. Artisans and their master's relationship was handled by a system of unwritten rules. When the karkhanas were not providing the goods to the market, it was likely to a complete end. The purchase inputs were under the control of court directly or indirectly.

The goods produced in these karkhanas were rarely send to the market but made for the royal use particularly. The state was appointing the best worker in these industries. European travellers said that there was a hierarchy among the artisans. Bernier said that there were two types of urban artisans. At one place there were bazar artisans who were nominally independent, lowly skilled and employee of the rich. On the other were the highly skilled artisans who were the employees of the karkhanas. These artisans were in service of kings and exclusively worked for then.

¹³⁸ Ibid. p.19.

¹³⁹ Ibid.

¹⁴⁰ *Ain-i-Akbari* (tr.) vol. I, op. cit., p. 12.

¹⁴¹ *Ain*, vol. I, p. 93-94.

Thus under the state Karkhana system a number of large scale industries were established in which the raw materials, the tools and the workshops were provided by the state. The workers were concerned only with the wages they produced, they had nothing to do with the consumption of the goods produced by them. These karkhanas were producing the goods according to the taste of the emperor and the state was financially much strong to meet the fancy demands of the elites, this gave no space to the private commercial agencies. Whereas their existence was depended upon the state requirements. This is the reason that with the decline of the Mughal empire these karkhanas also declined.

Organization of labour under the Mughals:

During the medieval period, the occupations were going on hereditary basis. The craft skills were transferring from father to son, hereditarily. The castes were representing different crafts. Therefore the caste organization was itself a training ground for the artisans, because there was not any school of art for the training of artisans during the Mughal period. Therefore the industries were working on family basis and were transferred from father to son. Abul Fazl says that a number of skilled master craftsmen were settled in the country to train people an improved system of manufacture.¹⁴²

Pelsaert gives us the information about the labour of Jahangir's reign, he said that the children of one artisans could not follow the craft of any other artisan.¹⁴³ Bernier said that the son of an embroiderer was brought up as an embroiderer, a goldsmith's son became a goldsmith and a physician's son was brought up as a physician.¹⁴⁴

According to Jadunath Sarkar the skilled artisans were given training in the imperial workshops, and then sent in service of the nobles. During the Mughal rule the private workshops were not existed.

We have very little information regarding the economic position of the artisans during the Mughal period. Abul Fazl also mentions about the matters and the craftsmen and he also gives us the information about the skilled and unskilled

¹⁴² *Ain*, vol. I, op. cit., p 93.

¹⁴³ Pelsaert, op. cit., p. 60.

¹⁴⁴ Bernier, op. cit., p 259.

artisans.¹⁴⁵ Except this very few information are available regarding the economic position of artisans during the Mughal period.

In broader sense there were two types of artisans. One was the independent artisans, who were working with their tools and raw materials.¹⁴⁶ Other was the artisans of the state karkhanas where the artisans found themselves more secure in comparison to the independent artisans as their wages and working hours were fixed, where they were strictly controlled by the state machinery.¹⁴⁷ The most favorable factor for the artisans of state karkhanas was the encouragement by the state. During the reign of Akbar the nobles were directed to wear special kinds of fabrics which gave the textile industries the chance for improvement.¹⁴⁸

Abul Fazl said that emperor Akbar paid much attention towards the establishment of a number of new manufacturers. The skill of artisans also increased under his patronage. Lahore had more than thousand manufacturers of shawls.¹⁴⁹ The imperial workshops played an important role in the diffusion of talent, which raised the cultural level of the country. The artisans trained in the imperial workshops were not absorbed in the state itself, but they were employed by the nobles.¹⁵⁰

Thus more or less during the Mughal period the condition of artisans was bad. According to Moreland the artisans of Mughal period worked mainly for the benefit of merchants, purchasers and middlemen, and the salary given to them was not high so that they could not save much for the period of crisis.¹⁵¹

Under the Mughals, the state did not have any machinery to improve the condition of workers. That's why, the Indian labors were exploited to a great extent.¹⁵² The working hours of labors were not fixed. There was not any fixed holiday neither weekly nor monthly. The working age of children was not fixed.¹⁵³ Only those artists were in some better position, who were working exclusively under their patron.¹⁵⁴ The recruitment was on the basis of caste. When there was a need of

¹⁴⁵ *Ain* vol.I, op. cit., pp 93, 235-36.

¹⁴⁶ Verma Tripta , op. cit., p 131.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid, p.132.

¹⁴⁹ *Ain* (tr.), vol. I, op. cit. pp. 97-98.

¹⁵⁰ Verma Tripta , op. cit., p. 132.

¹⁵¹ Moreland, op. cit. p. 175.

¹⁵² Verma Tripta , op. cit., p.136.

¹⁵³ Ibid.

¹⁵⁴ Bernier, op. cit., 255-256.

more labors, the artisans working in karkhanas brought with them their relatives to recruit in the karkhanas.¹⁵⁵ The brokers worked as the middlemen they were earning their profit at the cost of laborers.¹⁵⁶ During Mughal period there was the lack of industrial organization, there was no state control over the conditions of the employment of laborer. They were getting low wages, working hours were long, bad working conditions, no safeguard for the injuries which adversely affected the efficiency of laborers.¹⁵⁷

The artisans during the Mughal period were facing the oppression of state officers. They were facing the problem of low wages. Pelsaert writes that the artisans faced the oppression of the governors, the nobles, the diwan, the kotwal, the bakshi and other officers. Any of these officials could compel the laborers to work against their will or forcefully.¹⁵⁸ Another adverse factor which led to the deteriorated condition of artisans was the interference of middlemen. Because there was no chance for the artisans to earn profit because any product passed through several hands before reaching to the consumer. Bernier said that the money was passing to the hands of the merchants not to the artisans this was the main reason of deplorable condition of artisans.¹⁵⁹

During the Mughal period the wages of the artisans were very low in the state karkhanas. During this period there was not any labor organization, that's why we do not have any evidence of the discontentment of laborers against the low wages.¹⁶⁰ The artisans were given monthly cash salaries or daily wages it depends on the nature of their work. The skilled artisans were given the salary on regular basis. The skilled laborers were getting 3 to 4 dams a day.¹⁶¹ The form of the wages of workers were differed from workshop to workshop. In some workshops artisans were paid in cash while on others they were getting their wages in form of finished products.

According to some modern economists the wages of labourers might be either in form of cash which is called as 'money wages' or in form of luxuries, necessities which is called 'real wages'. According to Pigou we do not have sufficient

¹⁵⁵ TriptaVerma, op. cit., p. 136.

¹⁵⁶ Ibid.

¹⁵⁷ Verma Tripta, op. cit., p. 127.

¹⁵⁸ Bernier, op. cit., pp. 402-04.

¹⁵⁹ Ibid. p. 229.

¹⁶⁰ Verma Tripta, op. cit., p. 146.

¹⁶¹ *Ain*, vol. I, op. cit. pp. 235-36.

information regarding the wage of artisan. Abul Fazl in his *Ain-i-Akbari* gives a long list of prices of various commodities and wage of artisans engaged in the manufacture of gold stuffs, cotton and woollen goods and silk pieces.¹⁶² The fact is that during the Mughal period, wages in this period were not uniform all over the Mughal India.

In conclusion I would like to say that the textile industries flourished under the Mughals cannot compete the machine based industry of today, yet the products of the Mughal textile industry were competing with the products of the contemporary world. A large part of Indian textile industry was exported during that period, there was a great demand of Indian textile products, but the most preferred were the *muslin*, *chint*, block-printed clothes. Though the method of production of clothes was traditional, in spite of that Indian cloth was competing the world. This all was possible because of the attention given by the Mughal Emperors towards the development of the Mughal *Karkhanas*.

¹⁶² *Ain* (tr.), vol. I, pp. 98-102.

CHAPTER-5

TOOLS AND TECHNIQUES REGARDING THE MUGHAL TEXTILES

A Brief Introduction of Textile Techniques:

Indian textile industry constituted an important part of India's export during the Mughal period or textiles were at the top of the list of India's export. Culture and Craft, in India, are closely associated. Hand weaving in our country has truly been termed as an art and craft for it has produced some best known varieties of fabrics which include the Banaras Brocades, the beautiful *patolas* of Gujarat, the finest *muslins*, the exquisite Kashmiri shawls and other well-known varieties of other centers. The equipment which assists this synthesis of art and craft is the simple Handloom.¹

This chapter of the present work is an attempt to examine the various Technical aspects involved in the production of the textile materials in Mughal period viz., Cotton, Silk and Woollen. It also presents a detailed study of the Manufacturing process involved with clothes during the Mughal period e.g. what equipment were used to produce the textile material, what was the technique used in this process.²

Basics of Textile Production Techniques under the Mughals:

Cotton Textile Production Techniques-Cleaning:

The Indian textile fabrics are passed through the several technological developments as we get them in raw form, i.e. cotton fibres need cleaning before spinning into yarn. The cotton seeds are first left in the sun so that they could be easily separated from the floss. For this purpose two methods are required i.e. the roller and board and the cotton-gin or *charkhi*.³ The roller was a cylindrical drum used on a flat surface this is also visible in the frescoes of Ajanta. But the Ajanta remains are not supported by the text. It was first supported by the *Miftah-ul-Fuzala*, a Persian dictionary of 15th century, which describes that *chubakin* or *chuhlin*⁴, was an instrument used for separating the seeds from cotton (**Plate 41**).⁵ This was the method similar to that of used in medieval China. Perhaps it was a wooden roller was dragged by hands or feet.

¹ Sharma Suguna, *Studies in Indian Textiles*, Delhi, 1998, p.79.

² Alam Ishrat, "Textile tools as depicted in Ajanta and Mughal Paintings" in "Technology in Ancient and Medieval India" by Anirudh Roy and S.K. Bagchi, Delhi, 1986, p. 129.

³ Ibid.

⁴ Ibid.

⁵ Schlingloff, D. 'Cotton Manufacture in Ancient India', *Journal of Economic and Social History of the Orient* (JESHO), XVII (1), 1974, p. 89.

This foot roller consisted of two teakwood rollers. A handle was used to turn the upper roller and the lower roller was dragged along with it. The cotton was drawn with the help of these rollers. With the help of this process seeds were thrown out of cotton.⁶ This type of roller was used only for dealing the cotton with hard seeds. Whereas charkha was more common which was made of two wooden or iron rollers. These rollers were drawn by hand labour.⁷

Even after clearing the seeds cotton was not fully cleaned, it was full of dirt and knots. After cleaning the cotton, ginning was the next process. The ginners were cleaning the cotton with the help of a bamboo stick, which was stretched into a curve and joined together with the help of a leather string called *tant*. In India ginners are identified with an exclusive class.

The cotton ginning technique was also used in India since ancient period, which is depicted in Ajanta frescoes. Cotton ginning was done through charkha (**plate 42**). It is placed in a rectangular frame.⁸ In this charkha cotton is feeded between the two rollers and the rollers are moved with other hand.

A Mughal painting of late 16th century 'Idris giving instruction to mankind in the art of weaving gives the glimpses of stock for beating cotton.⁹ During 17th century the bow-string device¹⁰ is side by side used with beating method. But beating with stick has its own weakness, it might led to the breaking of fibres therefore the bowstring method was much better. Irfan Habib points out the earliest use of bow-string in Islamic world was about in 11th century A.D.¹¹

The important part of the bow-string device is the mallet. The mallet has double tapering heads. The mallet was holed from the middle by the bower in his right hand (**Plate 43**). The bow-string was gripped by the ridge of the upper head, when the string was stroked by the bower with the mallet. When it was stroked, bow-string was tensed and slipped off the ridge which helped in losing the cotton fibres. This bow

⁶ Bines, E. *History of the Cotton Manufacture*, London, 1835, pp. 66-7.

⁷ Watt, *The Commercial products of India*, London, 1908, p. 611.

⁸ Steingass, F. *Persian English Dictionary*, New Delhi, 2nd ed., 1981, p. 403 explains the word *Chubakin* as a wooden or iron instrument for separating cotton from its seed.

⁹ Schlingloff, D.. op. cit., p. 89.

¹⁰ Anirudh Roy and S.K. Bagchi, op. cit., p. 130.

¹¹ Proc. I.H.C., 42nd Session, Bodh Gaya, 1981, pp. 258-267.

string device is also survives now a days for like it was in medieval times. The cotton carder was called *dhuniya* in Hindi, and the process was called *dhunnai*.¹²

Spinning:

Spinning was the other important process which was used before weaving. Before the invention of spinning wheel spindle was the main instrument for spinning yarn.¹³ The spinning wheel came in India during the time of Ghorian attack in 13th-14th centuries.

The spinning wheel is depicted in a miniature of Jahangir's reign, where the Persian example is shown, in which the wheels are without handles.¹⁴ In another miniature spinning wheel is depicted by Bichitra during Jahangir's reign, in which a half handle with a whole for a small wooden peg-handle can be seen. **(Plate.44)** In a miniature of Aurangzeb's reign a spinning wheel with a piece of wood mounted on the axle at an angle is visible.¹⁵

When in spinning wheel yarn is spun, it has to be transferred to the spool. The earliest illustration of this tool could be found in *Miftah-ul-Fuzala*.¹⁶ Yarn was also collected in form of coils. This is depicted in the late 16th century Mughal Miniature.¹⁷ In it a man is shown transferring the collected yarn from the cage spool on to the wooden pegs driven into the ground in a circular manner. Then the coiled yarn was collected and dyed. Before weaving yarn was collected on the weft-spool to use in the shuttle. For weaving, the yarn is wound from the skin on a reed. The reed was pushed over the spindle head and the yarn was wound from skin on to the reed which served as the weft spool.¹⁸

In comparison to cleaning, spinning is less technical and less complicated process, it was generally done by women.¹⁹ In most of the houses in villages there

¹² *English Factories in India 1665-1667*, ed. W. Foster, p. 174.

¹³ Habib, Irfan 'Changes in Technology in Medieval India' Studies in History (S.H.), II, (1) Delhi, 1980, p. 17.

¹⁴ Anirudh Roy and S.K. Bagchi, op.cit., p. 131.

¹⁵ Platts, John T. *A Dictionary of Urdu, Classical Hindi and English*, Oxford, 1960, p. 549.

¹⁶ Anirudh Roy and S.K. Bagchi, op.cit., p. 132.

¹⁷ Kunhel and Goetz H., *Indian Book painting from Jahangir's Album in State Library in Berlin*, London, 1926, Pl. I (reproduction in colour of p. 14a of the Album, 'Scene at the gate of a town 1618 (SIC: rect. 1606).

¹⁸ Martin F.R., *The Miniature Painting and Painters of Persia, India and Turkey from the English to the Eighteenth Century*, London, 1912, Pl. 207a.

¹⁹ Orme, R. 'Historical Fragments of the Mughal Empire', 1783, p. 413.

were spinning wheels.²⁰ For spinning two types of equipment are used, one was a spindle for fine quality of yarns and other was spinning wheel used for coarse yarns.

The spindle was made of bone, ivory or wood.²¹ It consisted of a hook on its head in which the yarn was kept while the operation of twisting was going on.²² In it some wood was attached to its bottom for lending weight.²³ The length of Indian spindle is not clear but according to Forbes it was about nine to fifteen inches²⁴, whereas the weight and dimensions of the spindle was determined by the strength of yarn.²⁵ The spindle was sometimes accompanied with a distaff, a plain or ornamental stick which was about one foot to three feet long. Distaff was used for holding fibre from which the threads were spun. This process was held under the left arm of the operator.²⁶ When the spindle was operated, it was turned round with the left hand and the cotton was fed with the right.²⁷

The Indian cottons were produced by revolving left to right which is known as Z spun in place of the cottons produced by revolving from the right to left which is known as S spun. In Z spun method there is less damage of material²⁸ and the yarn produced through this method was very fine²⁹ and strong too.³⁰

The coarse yarn was spun on a heavy one thread wheel of teakwood.³¹ Forbes gives us information about this wheel. He says that this wheel is a combination of lathe, spindle with its whorl. At one side of the base board two long uprights are placed in which the driving wheel axles are placed. Two shorter uprights are placed at the other end to support an ordinary wooden spindle with its whorl horizontally. The operators sat on the ground alongside the wheel. The wheel was derived by the right hand and the thread was kept in the left hand, when the thread was stretched to a full arm length, the wheel was stopped by the spinner.³²

²⁰ Ray, J.C. *Textile Industry in Ancient India*, J.B.O.R.S., vol. III, Part II, 1917, p. 222.

²¹ Forbes, R.J. *Studies in Ancient Technology*, Leiden, 1957, vol. IV, p. 152.

²² Ibid.

²³ Baines, op. cit., p. 68.

²⁴ Forbes, op. cit.

²⁵ Ibid. p. 153.

²⁶ Ibid.

²⁷ Baines, op. cit.

²⁸ Forbes, op. cit., 151.

²⁹ Baines, op. cit.

³⁰ Forbes, op. cit., 156.

³¹ Baines, op.cit.

³² Forbes, op.cit.p,156.

The introduction of spinning wheel no doubt revolutionized the production output. No doubt that the use of spinning wheel led to the increase in production in comparison to the earlier rate of production. This provided to the people a complete occupation.³³ This process required less labour which affected the production and price of the yarn.

Weaving:

The loom which was used in India was not so perfect. The Indian loom consisted of two bamboo rollers, used for both the purposes warp and weft. For weaving process a single shuttle was used for the job of batten, was made like a large netting needle and a pair of paddles.³⁴ For weaving firstly the labourers were employed to undo the thread then it was winded on a small bobbin which is a small piece of reed popularly called *narkul*. These threads are inserted to a shuttle or *nar* for making woof or *bana* and are wetted before use. The threads are wound on a larger reed and are used for laying the warp or *tana*. Slowness of Indian weavers has been propounded by several people as they were stretching the whole length of warp, because it required more time and more labour.³⁵ At certain intervals the *narkul* stalks are stuck upright in the ground. On the ends of long reeds two large *naris* are fixed by wedges. A person who walks along round the upright drops by a skilful movement of his hands. The two threads one from each *nari* so as to lap on the alternate uprights. When the warp is laid it was dried by dressing it with the help of paste of flour. After this process it is taken to the loom.³⁶ In India the loom used is horizontal which resembles with the loom of ancient Egypt.³⁷

At Dacca looms are always erected under a roof. For making looms four bamboos are firmly fixed in the ground, connected by side species.³⁸ The loom consists of several units such as cloth beam, batten fitted with reed, healds with needle horse or pulleys and harness, cords and strings, lams and paddles.³⁹ The reed through which the warp passes is fixed to the 'Slay'. It is manually operated by hand. The

³³ Naqvi Hameeda Khatoon, *Urban Centres and Industries in Upper India, 1556-1803*, Bombay 1969, Bombay, p. 152.

³⁴ Baines, op. cit., 69.

³⁵ Naqvi, op. cit. p. 154.

³⁶ Ibid.

³⁷ Watson J. Forbes, *The Textile Manufactures and the Costumes of the People of India*, London, 1866, p. 68.

³⁸ Ibid.

³⁹ Sharma Suguna, op. cit. p. 88.

treadles are attached to the healds and in conjunction with the lease rods provide the necessary shedding for the shuttle to pass through in the process of weaving. The shuttle contains the pirn on which the weft yarn is wound. The warp beam is primarily designed to provide the required tension while weaving and the cloth beam is used to reel the cloth woven. The shuttle is thrown by hand from one end to the other.⁴⁰

When the apparatus of the loom are adjusted the process of weaving begins. Two persons are employed in the process of weaving. One throws the shuttle from the edge as far as he can across the warp; it is then seized by the second weaver who throws it on the opposite end and then returns it. Weaving of the fabric goes on till the warp threads reach quite close to the healds.⁴¹

There is a controversy about the working area of weavers whether they were working in an open area or in a covered area. The houses were not so large which could accommodate their whole length of the piece of cloth.⁴² The weavers working in urban area were working within their lodging in comparison to the weavers of rural areas, who were facilitated by the large open areas, where the whole length of warp could be stretched out.⁴³

This is also clear from the statement of Abul Fazl who says that at Lahore the weavers were busy in working within where the one thousand *karkhanas* of shawls were placed. Bernier also talks about the large halls of work at Delhi.⁴⁴ In Abul Fazl's *Ain-i-Akbari* we find the reference of Ghiyat- Din Ali Naqashband who was an excellent weaver of his time. Akbar received textiles signed by Ghiyat- Din Ali Naqashband as a part of the presents received from the Persian court.⁴⁵ Some merchants and Amirs were also running their private *karkhanas*. Sometimes some weavers were hiring the workshops to work.

The weaving process consists of interlacing of two series of the two series of threads, the warp and the weft at right angles. It was done by the loom. The loom

⁴⁰ Ibid. p.84.

⁴¹ Ibid. p. 90.

⁴² Baines, op. cit. p.69.

⁴³ Naqvi, op. cit., p. 155.

⁴⁴ Bernier, *Travels in the Mughal Court* tr. Constable and Smith, Oxford, 1934, vol.1 , p. 258-9.

⁴⁵ Abu-al-Fazl, *Ain-i-Akbari*, tr. By H. Blochmann and Col. H.S. Jarret, vol. 1, Calcutta, 1927-49. S.v. *Handwoven Fabrics of India* ed. By Jasleen Dhameeja and Jyotindra Jain, 1989.p.56.

generally used by Indian weavers was the horizontal loom.⁴⁶ The use of pit loom is first shown from Ziauddin Nakshabi's *Tuti-Nama* (1580-85).⁴⁷ In the pit loom the pair of treadles are placed in a pit in the ground. The weaver works by sitting on the edge of the pit. The treadles are well depicted in the late 16th century Mughal miniature.⁴⁸

In the miniature of Tuti Nama the warp beam is not there instead of it a man is shown busy in arranging a continuous flow of cross warp.⁴⁹ Whereas in a painting of 16th century warp beam is visible. This warp beam is tightened by a thick wooden peg. The warp tying string is shown near the beam. This string is loosened by the weaver to take the unfinished warp thread.⁵⁰

The number of man required for the production were either one, two or three. The two persons were required for the production of stripped stuffs or figured muslin, i.e. *doreah*. The ordinary muslin was woven by a single man. The production of *khes* required three men.

Bleaching:

After weaving, the cloth was sent to the bleachers and then to the dyers. The bleachers in India belonged to a particular caste who washed the cloth to earn their livelihood.⁵¹ Lime and some other ingredients were used to boil the clothes and were taken by the bleachers to a river or pond. Where these clothes were beaten on a stone, then these clothes were washed and cleaned. According to Tavernier lemon was an important ingredient for bleaching, lemon and soap were used in certain proportion by the washer men.⁵² Iraqi was a variety of soap used for brightening the cloth.⁵³ When the cloth was dyed then *khar* or carbonate soda was used for bleaching.⁵⁴ Sulphur was also used as bleaching agent. Thick soup of boiled rice was also used to starch the cloth and give it a whitish effect, it was also mixed with some indigo. Tavernier did

⁴⁶ Falk T. and Archer M., reproduce and describe miniature, 'Village Life in Kashmir' (a miniature from provincial Mughal School namely Awadh), from "Indian Miniature in the India Office Library", London, Pl. 3, Cat. 4, p. 47. S.v. "Technology in Ancient and Medieval India" by Aniruddha Roy and S.K. Bagchi. p. 135.

⁴⁷ Aniruddh Roy and S.K. Bagchi, op. cit., p. 133.

⁴⁸ Ibid. p. 134.

⁴⁹ Indian Heritage, Pl. 23, p. 32. Cited from *Technology in Ancient and Medieval India* by Aniruddin Roy and S.K. Bagchi, p. 134.

⁵⁰ Falk and Archer, Pl. 3, p. 47, op. cit.

⁵¹ Naqvi, op. cit. p. 157

⁵² Tavernier, 2, p. 28

⁵³ Muhammad Khan, Ali, *Mirat-i-Ahamadi*, tr. M.F. Lokhanwala, Oriental Institute, Baroda, 1930, p. 369.

⁵⁴ The letters of F. Coeurdoux, Appendix A, J.I.T.H., III, 1957, p. 29.

not find the upper Indian bleaching to the satisfactory level because of the poor effect it had. In upper India the bleaching process was not proper i.e. in Samana when *semianos* were washed, the two merchants were required to stay for the whole year.⁵⁵

The process of bleaching was also carried on at Dacca. Abul Fazl mentions a place called Catarashoonda, in Sunargong, was famous for its water which gave a complete whiteness to the cloth. According to Tavernier, Baroach was famous as a bleaching centre.⁵⁶ The best season for bleaching is from July to November. At this time the water is clear and pure. The bleachers were generally Hindus who belong to the *Dhobee* caste.⁵⁷

Besides these, the chief centers of *muslin* manufacture today are Banaras, Dacca, Hyderabad, Jaipur, Mysore, Kotah, Gwalior and Indore. The Indian weaver was an expert of the '*jamdani*' or the loom figured muslin with the exquisite delicacy of manipulation and their complicated designs. The following is a description of *jamdani* weaver as given by Taylor.⁵⁸ In manufacturing figured *muslin* two weavers sit at the loom. They place the pattern drawn upon paper below the warp, and range along the track of the woof a number of cut threads equal to the flowers or parts of the designs intended to be made; and then with two small pointed bamboo sticks they draw each of these threads of the warp as may be equal to the width of the figure which is to be formed. When all the threads have been brought between the warp they are drawn close by the stroke of the lay. The shuttle is then passed by one of the weavers through the thread and the weft having been driven home it is returned by the other weaver. The weavers resume their work with their pointed bamboo sticks, shuttle in the manner above described, observing each time to pass the flower threads between a great or less number of the threads to be formed".

The weaving and the spinning of silk is done in the same crude ways as that of cotton but the results produced are magnificent. In *patola* weaving warps and wefts are separately dyed. Firstly the silk warp is dyed in the lightest colour. Some measured distance is marked with pencil through which the dye cannot penetrate. Then the yarn is dyed with the brightest colour and this process continued till the

⁵⁵ E.F.I. 1618-21, p. 168.

⁵⁶ Abul Fazl, *Ain-i-Akbari*, S. v. Watson J. Forbes, Op. cit. p.71.

⁵⁷ Watson J. Forbes, Op. cit. p. 71.

⁵⁸ Mehta J. Rustam, "*Masterpieces of Indian Textiles, Bombay*", 1970, p.97.

brightest colour is reached.⁵⁹ The weft is also tie-dyed in the same way, when it crosses the warp each of its colours come in contact with the same colour in the warp. In colour design of *patola* we do not find harshness and abruptness. In it the colour flow one into another.⁶⁰

Technical Complexity of Shawl weaving:

The misconception about the traditional Kashmir shawls was related to the technical complexity of weaving process of shawls. By seeing an especially fine shawls it is generally considered that complex weaving techniques extremely sophisticated weaving equipment, and highly advanced loom were required in its production. But this is not the fact. The basic weaving technique is 'tapestry weaving', which is one of the oldest form of shawl weaving ever developed. It is very easy to learn.⁶¹

Looms:

The loom on which tapestry woven cloth is woven is in vogue since ancient times, and it was too simple. For this purpose a rectangular frame, vertical or horizontal is required on which a continuous warp can be tied, and it was joined with a coloured discontinued weft, by hand, if a colour is changed it is required by the design. Therefore no mechanical device is used in tapestry weaving. If the weft of a single colour is used it means that the weft will not be a tapestry weft, but an ordinary continuous weft running from selvedge to selvedge in a 2:2 twill weave, from thousands of years, most of the tapestry weaving around the world are done in a plain weave (**plate-45**). It was found useful by the weavers to design some system of simultaneously raising and lowering every other warp so that the tapestry wefts, like the wefts of any other plain woven fabric, can be inserted more rapidly through the opening (known as shed) created by this separation of alternate warps. A simple shed can be formed by just using one's fingers or by inserting a rod or flat stick or a 'lease stick' between alternate warps. Or a mechanical device including threads and draw cords which lift and lower groups of warps can be built into a loom used for tapestry weaving, just as it would be for many other looms. When most of the woolen shawls

⁵⁹ Biihler Alfred, Fisher Eberhard, Nabholz Marie Louise, '*Indian Tie-Dyed Fabrics*' vol.4, Historical Textiles of India in the Calico Museum, Ahmedabad, 1980, p.7.

⁶⁰ Ibid.

⁶¹ Ruth Barnes, Stevan Cohen, Rosemary Crill; "*Trade, Temple and Court Indian Textiles from the Tapi Collections*", 2002, Mumbai, p.113

produced in Kashmir either it is tapestry woven or woven in a single colour without decorative pattern,⁶² (**plate 46**), rather than a plain weave. Some more developed system of four shafts is used to sequentially raise and lower alternate pairs of warps, but it is the highest level of standard Kashmiri shawl loom. This is not very advance, loom technology. This tapestry technique was so simple that even an inexperienced child soon learned it.

The tapestry technique in weaving a Kashmiri shawl remains the same except the type of join (double interlocking is used most often (**plate 47**), but 'single interlocking is found in a few late example (**plate 48**).⁶³

Both the warps and wefts can be unbelievably thin. Its extreme was about that the warps are only 0.80 mm wide, the weft only 0.12 wide and there may be as many as 39 warps and 45 wefts in every square centimeter of that shawl. Because this is twill (2:2) rather than a plain weave, all of the warps are grouped in pairs, therefore during the weaving process only half of these pairs will be raised while the other half are slightly depressed. Which means that the weavers must use his left hand to further open the shed while his right hand inserts an almost invisible, fragile weft wrapped around a small wooden needle-like tool known as (*toji*) between 11 or 12 raised, paired warps for every centimeter of the pass. When the colour change is required, we must connect the two differently coloured wefts to one another at exactly correct point. As the weaving process was done by hand, the technique used was simple and the loom is also simple.⁶⁴

Twill Tapestry in India: Its possible origin:

The twill tapestry technique of weaving Kashmiri shawls was not indigenous to India. Now the question arises where did it come from, and when was it introduced. According to the current theory, the tapestry weaving entered India from Central Asia, and Iran was the second possibility.⁶⁵ China was also famous for a fine pictorial tapestry weaving known as *Kesi* or *Ko-ssu*. But, the material used for this tapestry weaving was not wool but silk as the Chinese were most familiar with it. This tapestry weaving was introduced in China through contact with Uyghur nomads massed on

⁶² Ibid.

⁶³ Ames Frank, *The Kashmir Shawl and its Indo-French Influence*, Woodbridge Antique Collector's Club, 1997, pp.51-52.

⁶⁴ Trade, Temple and Court, op. cit., p.114

⁶⁵ Ibid .p.118.

China's north-western border. The Uyghur tapestry weaving was done on woolen plain weave while the Chinese preferred silk as discussed above.⁶⁶

Similar were the conditions in India led to the development of tapestry technique. And its development can be traced back to the thousand years back. Thousands years ago there mounted nomads moved out of their original homelands to the vast grassy steppes of Mongolia, Siberia and Western Central Asia. Among these who reached India by passing through the Khyber or the Bolan Pass of Afghanistan and founded their short lived dynasties in India. The Scythians, known as Shakas in India were followed by the Yuch-chi or Kushana who controlled over northern India including Kashmir in the 1st century A.D.⁶⁷

Around 6th century A.D. Hunas invaded India, who destroyed the local Guptas of northern India which some other tribes like Gurjaras and later the Turks continued to invade India for centuries which was later followed by Mughals in 1526.

Here point is that any of these invaders could have introduced the art of weaving Kashmir shawls known as tapestry weaving. But if it was introduced by the central Asian nomadic people, it seems that it could have introduced in India during the first few centuries A.D. When this activity was at its peak. And the plenty of time was there for the development of tapestry technique. Out of which unique goat hair weft faced 2:2 twill tapestry technique was introduced in Kashmir.

Dyeing Techniques:

After process of bleaching the cloth was now ready for dyeing. In simple dyeing all shades required a separate treatment.⁶⁸ The natural resources were used for dyeing. A contemporary source gives us information about the seventy seven process of dyeing for making forty eight shades.⁶⁹ Most of the ingredient of dyeing were taken from flowers.⁷⁰ Those who produced dye from indigo are known as *nilgars* or indigo makers. The dye was derived from Indigo plant, which was cultivated from Lahore to

⁶⁶ Ibid.119.

⁶⁷ Ibid.119.

⁶⁸ Letters of Coeurdoux, op. cit., pp. 28-32.

⁶⁹ Naqvi. op. cit.159.

⁷⁰ Bayazid Baiyat, *Tarikh-i- Humayuni Wa Akbar*, Calcutta, 1941, pp. 197, 2000. S.v. Naqvi, op. cit. p. 55.

⁷⁰ Naqvi, op. cit., p. 159.

Oudh. But the dye produced in Biana and surrounding areas was considered the best.⁷¹

Indigo was the famous ingredient used for dyeing piece-goods blue. The shades produced with the help of Indigo are watery blue, greenish and sky blue⁷², blue black, dark blue, light blue, purple, lavender, mauve, lilac, emerald blue⁷³, dark-blue green and yellow green.⁷⁴ If turmeric was applied first and indigo afterwards, it would be dark blue green, when the process was reversed then the colour would be yellowish green.⁷⁵

The colours were generally fixed by some mordanting agents like sulphate of iron, lime, carbonate of soda and some sugar.⁷⁶ When a substitute was employed, the use of indigo was disregarded mainly for compounded colours like bottle green⁷⁷, mango green⁷⁸, purple.⁷⁹

The dyes included indigo were fugitive by nature, agents were used for fixing the pigments in the fibres of cloth. These fixing agents were called mordants.⁸⁰ Forbes wrote about the mordant, "is usually a soluble salt of aluminium, chromium, iron or tin precipitated on the fibres along with the dye by an alkali. Mordant and the dye then form a lake which adheres strongly to the fibres and this gives fast colour".⁸¹ A number of ingredients were used as mordants in the dyeing industry of India.

For red shade dyes lac (*Coccus lacca*) *shahab*, *majetha* (*Rubiatiactorium*), *patang* (*Sappan wood*), safflower (*Carthamustinctorius*), *al* (*mordindatinctaria*) were used. *Lac* is taken from the lac insect formed on the bark tree.⁸² It was found in Punjab and Oudh area, it was very costly and was applied on silk generally and seldom on calicoes. *Shahab* is identified with safflower. *Shahab* and safflower are the

⁷¹ Naqvi, op. cit., 159.

⁷² Moti Chandra, J.I.Y.H., vol. V, 1960, p. 22.

⁷³ Liotard, *Memorandum on Dyes of Indian Growth*, Calcutta, 1881, p. 97.

⁷⁴ Naqvi, op. cit. p. 160.

⁷⁵ Liotard, op. cit., p. 97.

⁷⁶ G. Watt, *India Art at Delhi*, official Catalogues of crafts exhibition, 1902-1903, Delhi, 1904. p. 77.

⁷⁷ Naqvi, op. cit. p. 159.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Naqvi, Ibid. p. 161.

⁸¹ Forbes IV, op. cit. p. 132.

⁸² Forbes (iv) op. cit., 104-5; Liotard, op. cit. p. 32.

different names of carthamustinctorius. Safflower was assessed for revenue by Emperor Akbar in the subahs of Lahore, Delhi, Agra, Oudh and Allahabad.⁸³

Majetha was like *al* founded in the areas of U.P., Oudh, Ranipur and Hathras. The root of its plant used for the purpose of dye. For getting dye the root was dried and beaten then finally dye was taken in form of glucoids in a red layer. Then actual dyed was separate from the colouring materials.⁸⁴

Al was also found in the areas of Oudh, Mau, Ranipur and Hathras⁸⁵, but it was particularly found at Kotah Boondi. It was also being assessed for revenue during Akbar's time from the parganas of Karrah, Jajmau, in the Subah of Allahabad⁸⁶, Eraj⁸⁷ and in the subah of Agra.⁸⁸ Here also root was used for colouring material.

Patang or *sappan* wood was imported from Deccan, its wood was pale but to contact with air it was turned reddish from which red colour dye was taken. When it was compounded with acid and alkali, was turned into yellow and violet colours. The vegetable dyes were also in vogue. Yellow colour was obtained from several vegetable products, main among them were turmeric (*Curcuma longa*), rind of pomegranate (*Puniciagranatum*), seeds of tun the flowers of *dhao* (*grisleadtomentosa*).

Yellow colour was also obtained from Harsinghar (*nyctanthes arborists*). It is saffron coloured stalk of the flowers which yield the dye from the milk-white petals.⁸⁹ It was mainly used with turmeric and safflower for dyeing silk cloth.⁹⁰ When it was used with safflower, orange or scarlet colour could be obtained, it depended on the proportions which was used for making the colours.⁹¹

From safflower besides red, yellow dye could also be obtained by washing the dried flowers. This yellow dye was used to produce prussion blue, mauve, deep purple and other shades of purple by mixing it with indigo.⁹² The yellow dye was also

⁸³ G. Watt, *The Commercial products of India*, London, 1908, p. 277.

⁸⁴ Naqvi, op. cit., p. 163.

⁸⁵ Liotard, op. cit., p. 57.

⁸⁶ *Ain-i-Akbari*. Vol.II, op. cit 92.

⁸⁷ Ibid. 99.

⁸⁸ Ibid. 101.

⁸⁹ Abul Fazl *Ain-i-Akbari*, vol. 1. trans. H. Blochman, reprint ed. in, Delhi, 2011. p.76 and 83

⁹⁰ Liotard,p.59

⁹¹ Liotard,p.26

⁹² Liotard,p.26

obtained from *Genda. Dhak* flowers (*butea frondosa*) from the wild growth trees were also used to produce yellow dyes.⁹³

Brown dye was obtained from the bark of *babul* (*acacia Arabica*), catechu (*accacid catechu*) and *hena* (*lawsoniq inermis*). When the babul bark is boiled in water, it produces shades of brown. The dye is obtained by adding catechu to the water and water was still boiled.⁹⁴ When sulphate or iron is added to it in place of catechu and lime, it produced a black dye. Catechu too yielded various tints of brown. Catechu was also used as the principal ingredient for obtaining the Agra' I color and its shades. Its tree was found in Bihar, Delhi and other parts of India.⁹⁵

Hena is a very popular dye. It was produced throughout India. It is also used for dyeing hands and feet.⁹⁶ Deep orange dye can also be produced with it. It was used as main ingredients in producing Shutri and abbasi colours.⁹⁷ The black dye was found on the banks of rivers, Ganges, Jamuna and Sind, it was obtained from the galls of tamarisk.⁹⁸

This black dye was produced by adding iron salts with galls of tamarisk.⁹⁹ It was mainly used as an addition in place of a principal dye.¹⁰⁰

In Hindustan the process adopted for dyeing the cloths was very ordinary and inexpensive. The implements used in this process are: a copper vessel to boil the cloth,¹⁰¹ an earthen vat, a wooden stick to stir the cloth into the boiling infusion, a wooden club to beat the cloth into smoothness and some old muslin to strain off the solution.

In the process of dyeing first the solution was made according to the prescribed proportion. Then the cloth was dipped into the solution and it went through several processes i.e. rinsing, drying. This all could be done either in sun or shade and finally the cloth was beaten to its smoothness. These were the main steps used for

⁹³ Liotard, p.77.

⁹⁴ T. Wardle., *Monograph on the Tussar and other wild Silks of India*, London, 1878, p.14.

⁹⁵ G. Watt, Commercial, p.9.

⁹⁶ G. Watt, Commercial, p.706 and p.707.

⁹⁷ Naqvi, op.cit.p.165.

⁹⁸ Liotard, p. 14, 15.

⁹⁹ Letters of Coeurdoux, op. cit. vol., 1957, pp.26-7.

¹⁰⁰ Liotard, p. 15.

¹⁰¹ Ibid. p. 132.

dyeing cloths in India. But in some cases all these steps were not necessary i.e. boiling was not needed in pink and orange shades.¹⁰²

Though the main process of dyeing cloths remained the same but few instances of slightly different processes are as follows: For dyeing fifty two pieces of Kharwa cloth in Bundelkhand, three seers of *halilah* (*terminalia chebula*), three seers of alum, five seers of *dhao*, eight seers of gum, one maund and ten seers of *al* were required. Fur separate infusions were made: *halilah* and water, alum and water *al* and *dhao* well dissolved in sufficient quantity of water and at last gum and water. In first two liquids, the cloth was steeped first then dried, the operation to be performed in the order given above. When the bales were immersed in the third solution, it was allowed to take a deep dye and then washed with soap and water. Then in fourth solution the cloth was steeped and washed. Then finally each piece was by applying gum on its surface and after. This all it was beaten smoothly.¹⁰³

For making emerald green nine ingredients were required, *nil* I *khassa* weighing six dams, turmeric quarter seer, peeled fun quarter *ser*, small Kakar-singi (*pistacia* or *shus integessina*)¹⁰⁴ quarter seer, sind of pomegranate half a seer and *ahar* (starch). The *nil* (indigo), *halilah* and *kasis* were finely powdered and boiled together. The turmeric, peeled *tun*, Kakar-singi, sind of pomegranate and alum were similarly finely powdered and boiled together. Both the solutions were cleaned before use. Then the cloth was dyed dried in both the solutions on after the other. After this whole process *ahar* was added in the second infusion, and the cloth steeped in it, rubbed with hand dried and beaten smoothly.¹⁰⁵ For obtaining *gulabi qarari* (permanent pink) only alum equaling two dams and the bark of Kachnar were required. The cloth was first steeped in alum and water then it was dried. In this process alum was used as a mordant to acquire the pink dye permanently. Then bark of Kachnar boiled and cleaned and the cloth was dyed in this liquid and dried after the whole process.¹⁰⁶

For *gul i- anar*, turmeric equaling one dam, *shahabi* Khassa according to taste or little more than ordinary pink and some lemon were required components. Water pounded with turmeric was required. Then the cloth was steeped in the solution and it

¹⁰² Naqvi.op.cit.p.170.

¹⁰³ Ibid., p.171.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid., p.172.

¹⁰⁶ Ibid.

was dried partly in shade when lemon was added to *shahab* the cloth was dipped again and finally dried in the shade.¹⁰⁷ To obtain orange the proportion of components was altered; the amount of *shahab* was reduced, turmeric of about two dams was added. The process for obtaining the colour was same as used in *gul-i-anar*.¹⁰⁸

Another method was tie-dyeing, which was common around Delhi,¹⁰⁹ (pl. 49) The plate 49 exhibits emperor Jahangir wearing a double *patka* in which the short one is tie-dyed. Berar and Orissa during the declining days. In some types of printing wooden dyes were employed for stamping the patterns on the fabrics.¹¹⁰ These dyes were cut in four classes flowered borders, which could be used continuously, secondly single flowers, which were impressed by one stamp of the dye; flowers and stripes were used to print in running diagonal; letters and quotations, pictures and figures were required to use successive dyes.

But before the printing the cloth had to pass through several processes i.e. washing, bleaching, mordanting and dyeing. The washing of cloth alone took several days as it was boiled in impure carbonate of soda and other ingredients, and beaten smoothly with wooden clubs and again boiled in a copper vessel and if the cloth as coarse the whole process was repeated again. Then it was left in sun to dry.¹¹¹

Bleaching was another process which was mainly done by scheduled caste *chamars* or *dhobis*.¹¹² In this operation an emulsion of castor or linseed oil was prepared in which the cloth was dipped, dried on grass under cover then it was dried for an hour in the sun from three to fifteen days in the shade.

Printing and Painting:

Printing was another process used for making the cloths more magnificent. It was more complex method in comparison to the process of dyeing. It is an art of applying different colours in different manner on a particular part of a cloth and the rest of the part of a cloth remained white or the entire cloth was dyed in one colour by leaving some parts of the cloth where some other colours were employed.¹¹³ This art

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ *Mirat*, op. cit. 462-3.

¹¹⁰ Liotard, op. cit. p.132.

¹¹¹ Ibid., p.132.

¹¹² Ibid.

¹¹³ Ibid.

was expanded in India by the low price chintz which according to Abul Fazl was of two dams per yard.¹¹⁴

Lahore was a center of printing coarse stuffs where the prices of Tavernier's account resembles with that of Abul Fazl's, which was from rupees 16 to 30 per twenty pieces.¹¹⁵ At Patna Chintz was produced for local consumption on coarse cloth.¹¹⁶ In later times, the Chintz of Lucknow¹¹⁷ and Farrukhabad¹¹⁸ got high esteem.

There were several types of printing process used in Mughal Hindustan. The first one was stamping of gold and silver leaf. It was mainly used for curtains, quilts, razai etc. Lucknow and Farrukhabad were the main centres for producing these printed stuffs. For *Chikan* work patterns were stamped on thin fabrics like *tanzeb* and muslin. Printing was also done on other fabrics like ordinary chintzes, beddings, prayer carpets etc.¹¹⁹ It might be possible that the method of engraving patterns on these wooden dyes would be the same as used for engraving seals, coinage or inscriptions.

Besides the direct application of pigment on to the surface of prepared cotton yardage, the techniques of fixing colour to woven cloth to create patterns and compositions again involves either the use of resist, mordant resist, or combinations of the two, applied with a pen, brush, metal or wooden block . In order to resist the dye, areas of the cloth that are to form the pattern or design are coated with impermeable substances such as wax, gum or rice paste, resin, starch or mud.¹²⁰ Once the cloth has been dyed, the resist substances are removed by immersion in hot or cold water, or by ironing or brushing. Mordant-resist textile decoration techniques involve the painting or printing of dyestuffs that will react with mordant-prepared cloth; or alternatively, the painting or printing of mordants on to cloth which, when immersed in a colour bath, will cause the dyes to react and be fixed by the patterns of applied mordant.¹²¹

¹¹⁴ *Ain-i-Akbari*, vol.1, p.95.

¹¹⁵ Naqvi.op.cit.p.173

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Mukherji, T. *Art and Manufactures of India*, Calcutta, 1888, p.351.

¹¹⁹ Tavernier, vol.2, p.5.

¹²⁰ Gillow John and Barnard Nicholas, *Traditional Indian Textiles*, London, 1993, p.39.

¹²¹ Ibid. p.39.

Indians were well known with the practice of printing, even it is considered an Indian practice other were only adopting the things from here.¹²² The practice of printing and include several methods i.e. the ancient methods resist and mordant method of painting, a direct colour printing by blocks was also used on a large scale.¹²³ Indian calicoes were exported on a large scale to the other countries of the world, these all were the printed calicoes.¹²⁴ The painted cloth was produced only at Masulipatam which was only for the royalty.¹²⁵ During the 17th century Iran was importing Indian printed calicoes to a great extent, at the same time, used the same terms *chapa* for block printing and *chit* for calico printing.¹²⁶

The Gujarat region was one of the great textile-exporting areas of India. Textile patterns were usually applied by block printing, and evidence of Gujarat's block-printed wares have been excavated at Fostat, near Cairo, the oldest of which have been dated as fifteenth century or earlier. These textile fragments are resist printed with unsophisticated yet pleasing designs typical of the hand-printed textiles of the region today.¹²⁷ (pl. 50) This plate illustrates a piece of block-printed Indian cloth found from Fostat Egypt.

At ancient sites we find the use of clay stamps, but these were used most probably on plastic material like wet mud walls was hardly used for printing on cloth.¹²⁸ For the printing of cloth wooden or stone stamps were used. We find so many evidences of cloth-printing from the Mughal times. A number of Mughal nobles patronized the experts. The word *shit* was used for the cloth printed with wooden stamps during 17th century, and was of Indian origin, it was a corrupt form of *Chhint* or the European 'Chintz'.¹²⁹ The Author of *Ma'asir-i-Rahmi* (1616) gives us information that the *chint* designs were made at Sironj for which the block printing

¹²² Habib Irfan, *Technology and society in Mughal India*, 1980, Tokyo, p.27.

¹²³ *Indian Travels of Thevenot and Careri*, ed.by S.N. Sen, 1949. p.51

¹²⁴ Tavernier, *Travels in India*, tr. by V Ball, ed. by W. Crooke, vol.2, p.4.

¹²⁵ Thevenot quoted in Irfan Habib's *Technology and society in Mughal India*, 1928, p. 27.

¹²⁶ *Technology and society in Mughal India*, op.cit. 1980,Tokyo, p.27.

¹²⁷ Gillow John and Barnard Nicholas, op. cit., p.89.

¹²⁸ Habib Irfan, *Technology in Medieval India c.650-1750*, Delhi, 2009, p.45

¹²⁹ Ibid.

method was used. Sironj was the main centre of chintz manufacture.¹³⁰ Thevenot gives us information about the colour impression of block-printing at Agra.¹³¹

The report of a Frenchman George Roque is the first known source on cloth printing which gives us the information about the material and technique used in block printing. He tells us information about the wooden blocks.¹³² He writes that the printer differentiate the outlines by the lines and hollow of the first block. After it other block was used, which was of same type. But the second block had the hollow structure whereas the outlines of the first block are raised.¹³³

No confusion is made to the use of mordants and it is supposed that this printing was only applied, with a sort of ink, for the mere outline and not for the colours—and this was done only when skilled hand-painters were not available. The filling in of the design with the various colours was always done by hand, thus there is no doubt about their origin being dyed mordants.¹³⁴

There is a question now the printed cottons were traditionally made in India. We find the fact of their existence from the documentary evidence of the 17th century and earlier.¹³⁵ The actual “printing” of cotton in India, was done either with mordants, resists, or real colours. The famous Dr. Edward Bancroft (1744-1821), who studied cotton printing throughout his life, when describing the manufacture of Indian chintz after Querelles-Beaulieu and Coeurdoux, he gave emphasis to the fact that the use of the word “printing”, discounted the fact that neither mordants nor other method of printing had ever been applied by means of blocks or forms, as in Europe. Only the brush, he argued, was known in India. This statement raises the contradiction to the documentary evidence already mentioned, and we must admit in this connection that Bancroft the historian was less well informed. We know that two; sorts of chintz were

¹³⁰ Abul Fazl, *A'in-i-Akbari*, ed. Blochmann, I, 1866, p. 82.

¹³¹ Abul Baqi, Nishawandi, *Ma'asir-i-Rahmi*, ed. M. Hedayat, Hosain Calcutta, 1931, III (2), pp. 986, 1658-9.

¹³² Thevenot, *Account of India* tr. Levant, part.3. (1687, rptd. Indian Travels of Thevenot and Carari, Sed. S.N. Sen, New Delhi, 1949, p. 51.

¹³³ Quoted in Paul R. Schwartz; *Printing on Cotton at Ahmedabad in India in 1678* (Museum Monograph, No. 1, Ahmedabad, 1967, p. 8).

¹³⁴ Irwin John and Schwartz P.R.; *Studies in Indo-European Textile History*, Calico Museum of Textiles Ahmedabad India, 1966. p.121

¹³⁵ Ibid.

made in India—the painted and the printed. The painted were much better in quality in comparison to printing.¹³⁶

The possible printing with real, but fugitive, colours will be left aside, as the fastness of all Indian chintz was its most celebrated quality. The only information available about block-printing in the East concerns not India, but other countries.¹³⁷ For instance, the French traveller Thevenot, who died in 1667, said that he saw in Persia coarse cottons printed with blocks “besmeared with colours”. We do not know if these were actual pigments (evidently not fast) or mordants. For the latter it must be borne in mind that the mordant for black and violet is yellowish, and the mordant for red colourless, the latter being only slightly tinged with red from Sapan wood. Thus, this information is too vague to be taken as evidence for one or the other way of printing cloths.¹³⁸

In old times, fastness of colours on cotton could only be obtained by the help of mordant (with the exception of indigo blue, which dyes directly in a reduced state of white indigo). These were put either on the cloth or in the dyeing vat itself. From the technical point of view, the following can be said that the printing of a resist with a wood or metal block and subsequent dyeing fast in as many vats as are necessary offers no difficulty. Whereas the printing of mordants is quite different from their painting and supposes a much more elaborate technique and this for the following reason: the best mordant is that which abandons easily a maximum of its metal to the cotton fibre.¹³⁹ An aqueous solution of appropriate natural alum gives excellent results when painted, especially on a cloth prepared with an astringent (tannin); but to be printed with a block the mordant must be thickened, and here things change greatly. First of all, the drying of a thickened mordant is a very delicate matter: by numerous operations the thickening agent like starch and gum must be taken off as completely as possible before dying, moreover thickened alum does not abandon its aluminium oxide to the cotton in a way convenient to obtain colours of a high standard.¹⁴⁰

¹³⁶ Ibid. p.122.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Ibid.

Mr. John Irwin tells me that there is plenty of documentary evidence to show that the bulk of 17th century Indian chintz exports (at any rate from Western India) were of the kind described by contemporary traders as “printed”. He also says that these “printed” cottons mostly had coloured grounds.¹⁴¹ However, all such evidence (including the evidence of French reports of the late 17th and early 18th century), while showing that both printed and painted cottons were produced contemporaneously in many parts of India, always stress the fact that the latter were superior in beauty. Could the so-called “printed” cottons, admittedly coarse, have been produced by the resist process, being thus similar to the samples found in Egypt and identified as Indian export cottons of the 12th to 16th centuries.¹⁴²

The solution of such technical problems lies in detailed analysis of cottons, the origin and age of which are definitely known. This does not seem to have been yet made with the necessary care. So, far the time being, the question of when and how the Indians began to *print* their chintz with mordants remains open. It has hitherto been generally assumed that this technique was discovered in Europe. Is there any reason to revise this conclusion, and to attribute the discovery to India.¹⁴³

In conclusion I would like to say that the textile techniques developed in India during the Mughal period were no doubt inferior to the technologies of today’s India. But, the quality of the textile material produced during Mughal period was very fine. Some of the techniques are replaced by the machinery but some are still continuing even today e.g. block-printing, tie and dye method etc.

¹⁴¹ Ibid p.123.

¹⁴² Ibid.

¹⁴³ Ibid. p.124.

CONCLUSION

CONCLUSION

This work aimed for an explorative study of the Mughal imperial costumes and designs during 16th and 17th century. As the Mughals were maintaining the gorgeous dressing sense at their court which symbolizes their pomp and show. The richness of the costume of the Mughals was the sign of their prestige. The costumes they were wearing, were made of so fine material that no one could compete them in the field of textiles in the contemporary world.

The early Mughal rulers like Babur and Humayun prepared the ground for future developments. Akbar with his usual remarkable gift of invention brought into fashion many other garments, and adopted them to his own requirements thus changing the style of dress completely. He fashion and designed his own garments. Under him the *takauchiya* became very fashionable in summer as well as in winter because it could be stitch out of silk, gold cloth and woollen fabric. Moreover it was a typical Indian garment signifying the first change Centre Asian to Indian conditions and also indicating that the Mughal were influencing by the Indian culture. In his age *takauchiya* was replaced by *jama*.

There were various kinds of each of these garments, and it is not possible to describe them. Except *takauchiya*, *dutahi*, *Shah-ajida*, *suzani*, *qalmi*, *qaba*, *farzi* a number of *chiras*, *fotas* and *dupattas* were also available. Costly dresses worn at feasts and presented to the nobles and servants of the state as a mark of honour were also of a wide variety. Every season a thousand complete suits of honour were also of a wide variety.

The type of costumes prevalent during the Mughals can be observed from a group of miniature paintings of the 16th and 17th century. Akbar was a visionary and a philosopher. During his reign we find a great intermingling of the foreign culture and the indigenous one. He was liberal and his policies reflected the open mindedness and tolerance of the emperor towards his subject. In this way he integrated with that of the people conquered land and unifying the two races into a composite whole.

The costumes of Jahangir became more glamorous, sumptuous and decorative. During his reign length of *jama* increased to some extent, the double *patka* became popular which is observed from the miniatures. The transparent fabric such as fine *muslin* were in vogue during this period. The costumes of ShahJahan became more sumptuous and decorative and there was a greater emphasis on the use of exquisite and luxurious fabrics such as the *Kimkhab*, *altas*, *makhmal*. The extensive use of *zari* became popular. Whereas during the reign of Aurangzeb we find very simplicity in the costumes , though some changes were introduced in the costumes during his reign e.g. the length of the *jama* increased to some extent in comparison to the Shah Jahan's reign. The turban became shorter and it was high at the back and was of an angular shape, his turban was high at back and was of an angular shape.

There was also the influence of Hindu women dresses on the costumes of the women of harem as they adopted *ghaghra*, *choli*, *odhani*. Similarly the women of Rajput court were adopting the Mughal dresses like *peshwaz*, *paijamas* etc.

Both Akbar and Jahangir evinced great interest in the skills of the craftsman. Nur Jahan the glamorous and talented wife of Jahangir shared this enthusiasm and is said to have evolved many new patterns. Therefore a large number of costly stuffs with gold and silk threads and brocades were prepared in the imperial *Karkhanas* and brocades were prepared in the imperial *Karkhanas*, the most popular among them were *zardozi* and *Kalabattu* which were silk stuffs embroidered with *zari*, *kashida* and *kalghai*.

Under the Mughals skilful masters and workmen were invited and patronized to settle in the country to teach people an improved system of manufacture. Imperial workshops were established in the towns of Lahore, Agra, Fatehpur Sikri and Ahmedabad. Thus the workmanship of the stuffs improved tremendously under royal patronage. All kinds of hair-weaving and silk- spinning brought to perfection and the imperial workshop furnished all the stuffs made outside the country. The taste for fine material then became general and the drapery used at least surpassed every description.

Our investigation enables us to conclude that the Mughal costumes and designs, originated from Centre Asia developed to its height under the Mughals. The give and take between the two cultural identities in India led to the formation of a

new gorgeous style of clothing. The Mughals were not only themselves influenced by the indigenous style of clothing but affected the indigenous style of clothing in different ways.

The dress codes used at the Mughal court during the 16th and 17th century were continued even during the 18th century with slight changes for example the 16th or 17th century *jama* was replaced by the *choga*, in which some changes were introduced like it was opened from front and its length reached up to the feet, or it covered the whole feet.

We are bearing the legacy of the Mughals either it is costumes, designs, fabrics, textile industries or the textile techniques. Not only the designs and motifs even techniques are also continuing like the block-printing technique is continuing still today, tie-dye methods are also same even today. Even today we prefer to wear the costumes made of fine *muslin*, silk *brocades*, *patolas*, and fine woollen clothes, the motifs like floral *buti* work is still continuing today. So far as the textile techniques are concerned the small scale industries are replaced by the high-tech industries of today but some of the old techniques are continuing still today. The Mughals were wearing the costumes made of very fine material. They themselves were keenly interested in the encouragement of the crafts, and providing the assistance to the artisans, and were observing their work.

Thus the present study concludes that despite its foreign character the Mughals influenced the native people of India to a great extent in each and every aspect of life either it is culture or politics. The costumes and the designs of the Mughals also took a lot from the indigenous culture. But the most important thing was that the Mughals provided a boost to the culture already existing in India by intermingling its Centre Asian nature of character. The most important reason for this was the establishment of a long peaceful reign by the Mughals which provided further opportunities to improve the existing culture in India.

The legacy that the Mughal left behind them is benefitting in many ways even today. When we talk about the costumes of the Mughals there were also the elements of continuity. Even today the fabrics we are using for making the costumes are quite similar to the costumes of the Mughals like *patolas*, silk *brocades*, fine

muslin clothes are still continuing. The style of wearing the dresses also resembles like *jama* resembles to today's *Sherwani* to some extent.

ILLUSTRATIONS



Plate 1.

Details of Shah Jahan on a Terrace Holding a Pendant circa. 1627-28.

Metropolitan Museum of Art, New York.



Plate 2 .

The Jhangir Album, folio 22b. Work of Bishandas.
Staatsbibliothek Preussischer Kulturbesitz, Berlin.



Plate 3.

Prince Salim holding a falcon, c. 1620s.

Album.3. Mughal, Deccani, Rajasthani, Persian, and Bukharan Paintings.

Sixteenth-nineteenth Centuries, Raza Library, Rampur.



Plate 4.

**Prince Khurram in his Twenty-Fifth year of Age by Nadir-uz-Zaman,
1616/17 A.D.**

Victoria and Albert Museum, London. (Minto Album)



Plate 5.

**Aurangzeb standing and holding a jewel, last quarter of 17th century.
Album.3, Mughal, Deccani, Rajasthani, Persian, and Bukharan Paintings.
Sixteenth-nineteenth Centuries, Raza Library, Rampur.**

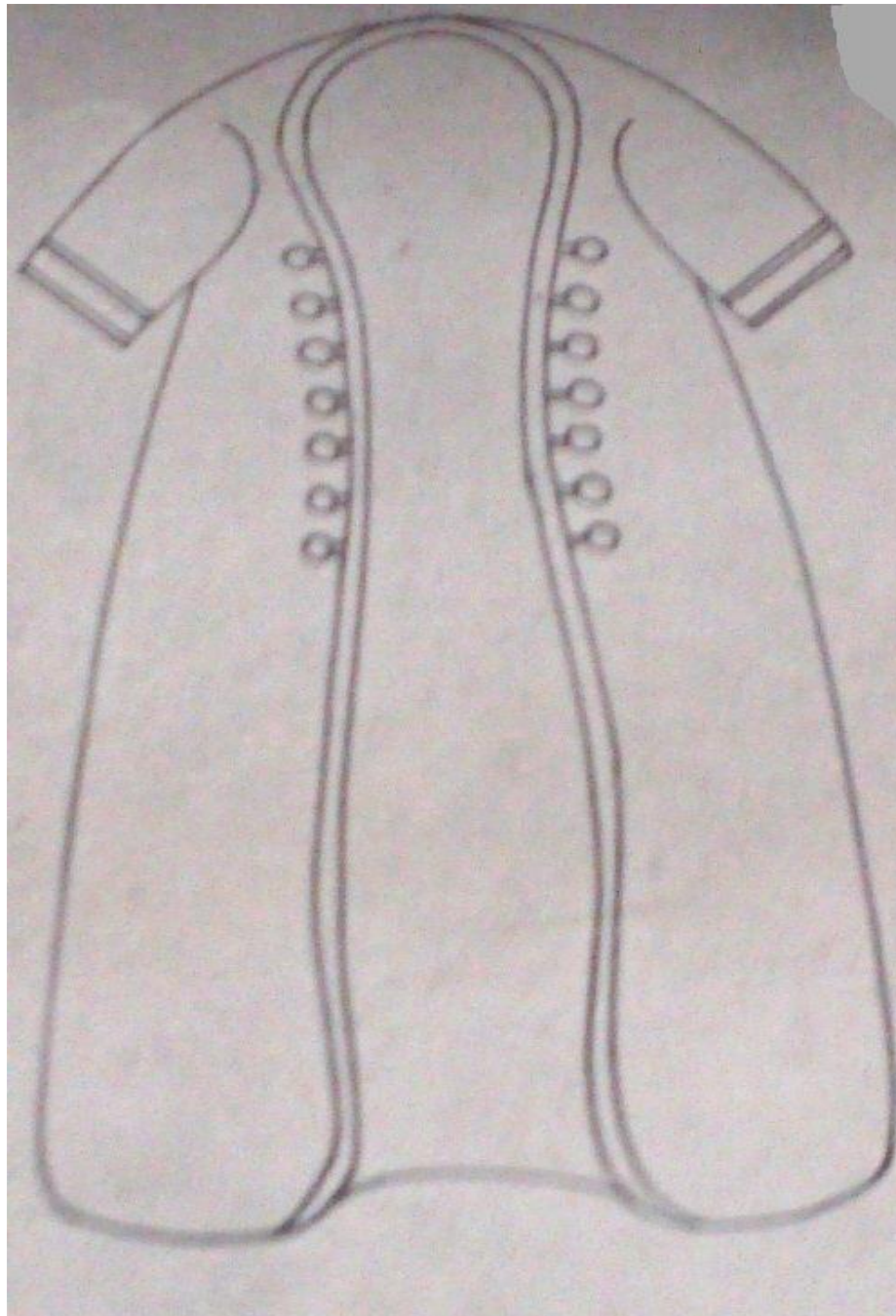


Plate 6.

A Qaba

Reproduced from S.P. Verma's, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978. pl.31, fig.2.

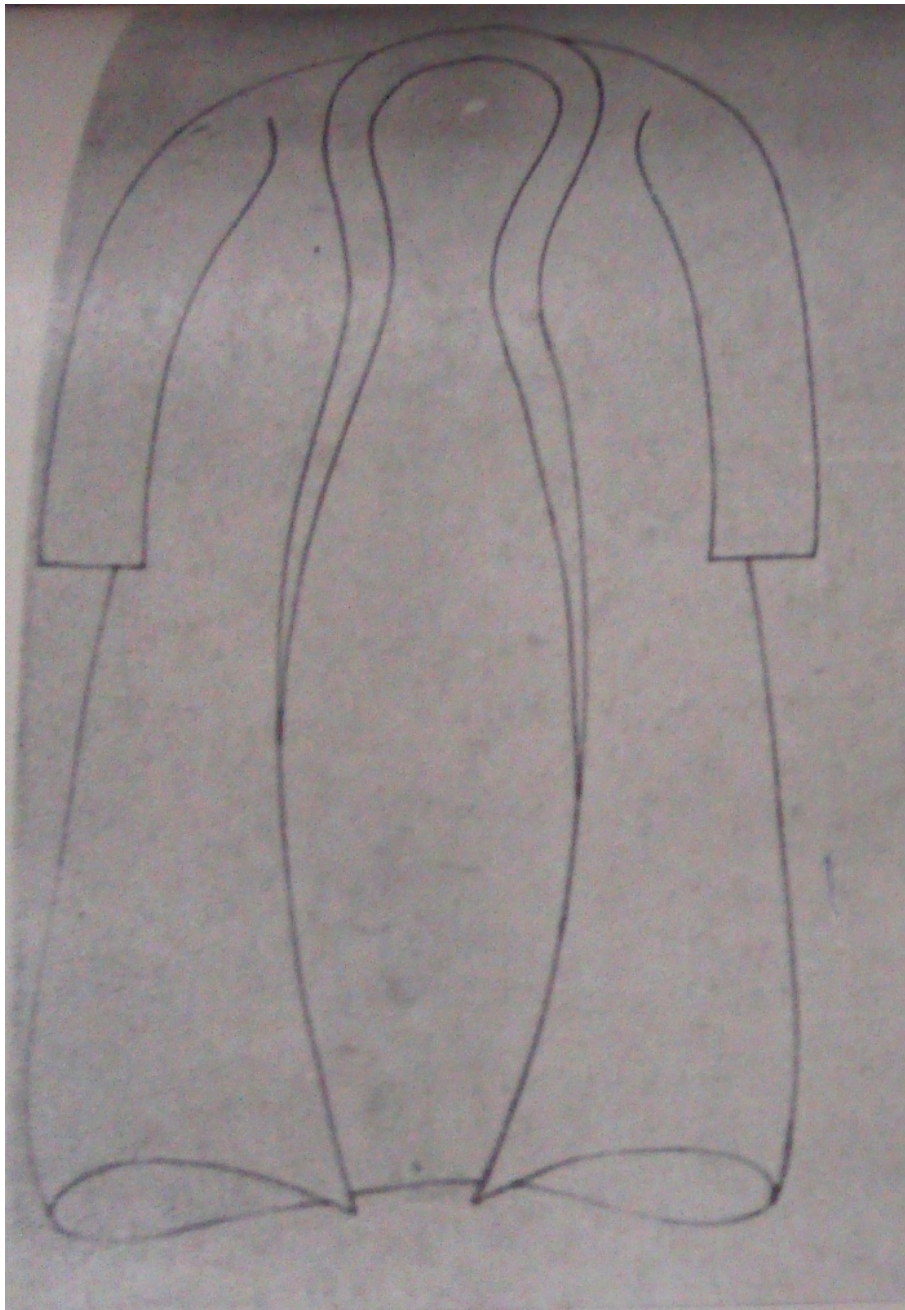


Plate 7.

A Gadar

Reproduced from S.P. Verma, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978. pl. 31, fig.1



Plate 8.

**A youth, holding a falcon in his hand, wearing a Gadar type of garment.
Album.3, Mughal, Deccani, Rajasthani, Persian, and Bukharan Paintings.
Sixteenth-nineteenth Centuries, Raza Library, Rampur.**



Plate 9.

A Farzi

Reproduced from S.P. Verma's, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978. pl.30, fig.1.

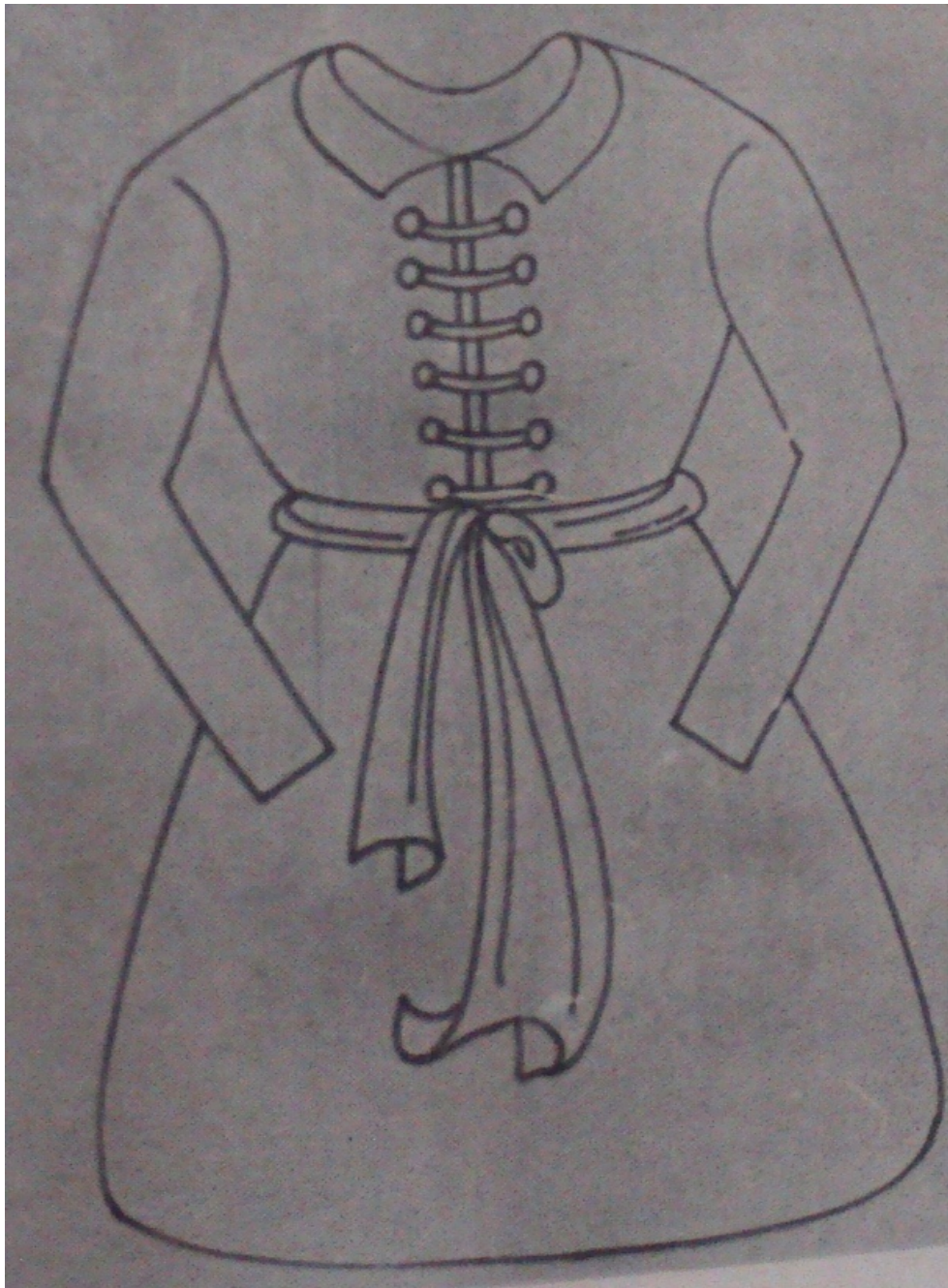


Plate 10.

A Farzi

Reproduced from S.P. Verma's, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978. pl.30, fig.2.



Plate 11.

Prince Salim circa 1635 signed by Bichitr.

A Page from the Minto Album, Victoria and Albert Museum, London.

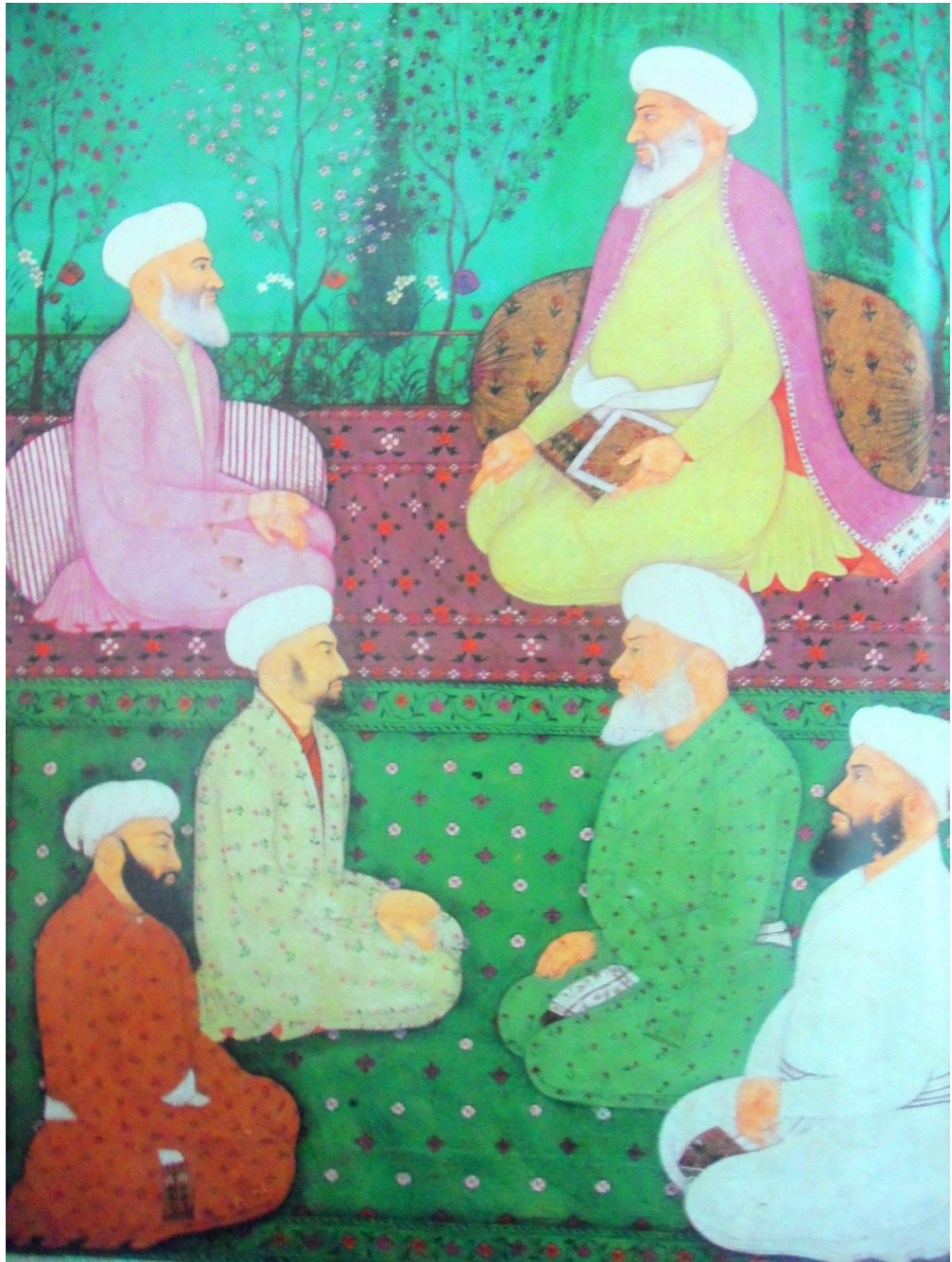


Plate 12.

Provincial Northern Indian School, c.1650-60

Victoria and Albert Museum London.



Plate 13.

Turbans

Reproduced from S.P. Verma's, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978, pl. 32.



Plate 14.

A portrait of Shah Jahan signed by Nadir-al-Zaman(Abu'l Hasan).

Inscribed by Shah Jahan on the lower border; “this is a good likeness of me in my twenty-fifth year and it is a fine work of Nader-al- Zaman”.

Victoria and Albert Museum, London. (Minto Album).



Plate 15.

“Portrait of Mir Musawwir in his old Age” Signed by Mir Sayyid Ali.

Circa 1565.

Paris, Musee Guimet.



Plate 16.

Emperor Jahangir Weighs Prince Khurram, Circa 1610-1615.

Ascribed to Manohar.

British Museum, London.



Plate 17.

Nur-Jahan with a rifle in hunting attire by Abul Hasan, c.1617.

Album.13. Mughal, Deccani and Persian Paintings. Sixteenth-twentieth Centuries, Raza Library, Rampur.



Plate 18.

Dance parties of Mughal Emperor, Painted by Bhola. Padshah Nama, c. 1635.

Royal Library, Windsor Castle, London.



Plate 19.

Peshwaz

Reproduced from S.P. Verma's, *Art and Material Culture in the Paintings of Akbar's Court*, New Delhi, 1978. pl.30, fig.3.



Plate 20.

Shah Jahan embracing his beloved last quarter of 17th century

**Album 10: Mughal and Rajasthani Paintings. Seventeenth-nineteenth Centuries,
Raza Library, Rampur.**



Plate 21.

**Young Akbar learns to shoot under the guidance of Bairam Khan signed by
Goverdhan, An illustration from the Akbar-nama dated 1604.**

British Library, London.



Plate 22.

A falconer wearing a *jama* with animal patterns. Circa 1600-05.

Los Angeles County Museum of Art.



Plate 23.

**Shah Jahan sitting in Jharokha a Darbar Painting from the Badshahnamah
painted A.D.1650.Europeans bring gifts to Shah Jahan, circa-1650.**

Royal Library, Windsor Castle, London.



Plate 24.

**Salim Spearing a Lioness, c.1600-05,
Victoria and Albert Museum, London**



Plate 25.

A Patka Early 17th century with single PLANT motif resemble the Chinese cloud .

Reproduced from “Silk Brocades” by Yashodhara Agarwal) .p.100, plate.82.



Plate 26 .

***Patka*, mid-17th century. A typical Shahjahani Buta with Ribbon like leaves,
Drooping Sosan Flower, and Buds on a Gold Zari Ground.
Reproduced from “Silk Brocades” by Yahsodhara Agarwal, pl. 91, p.105.**

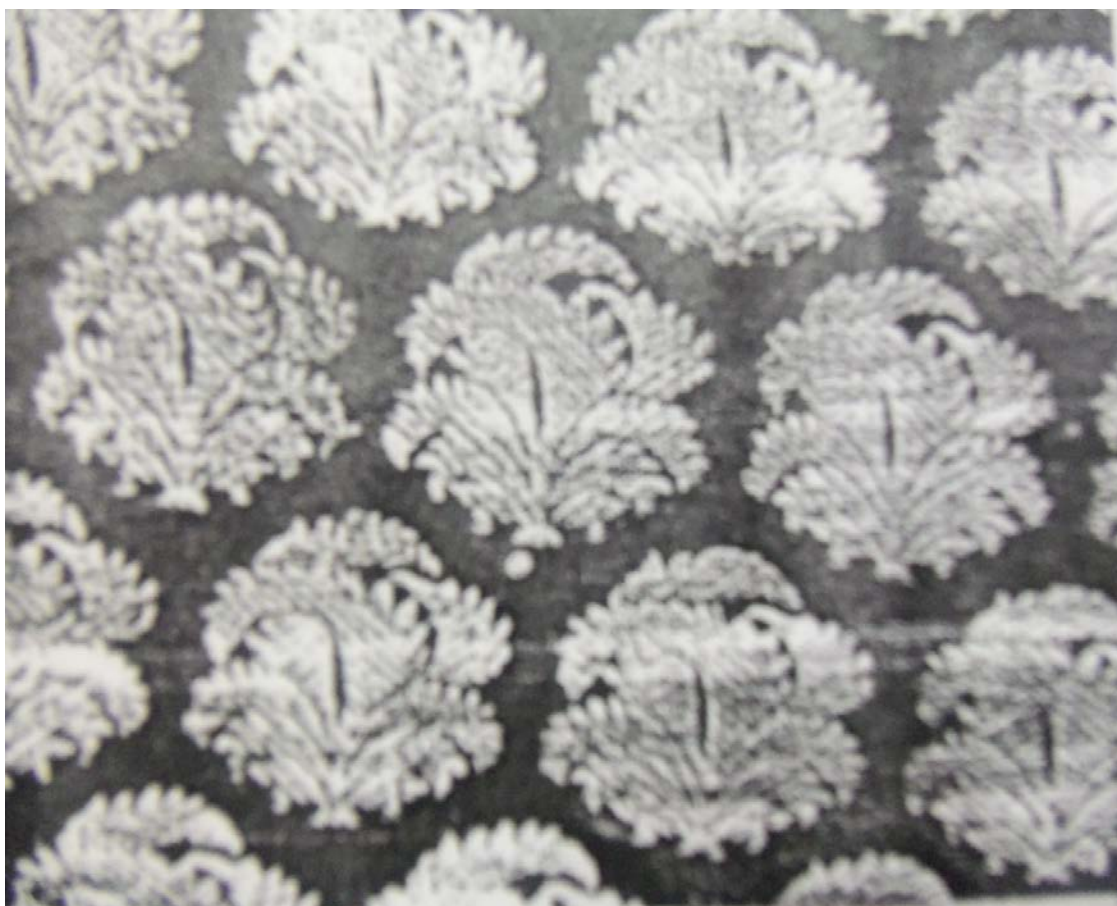


Plate 27.

Butis of Nicotiana Tabacum spring motif in Brocades.

**Reproduced from “Flowers In Indian Textile Designs” by Vijaya Krishana in
“Journals of Indian Textile History”, Calico Museum of Textiles Ahmedabad
India, no.7, pl.20, 1967.**



Plate 28.

A Pattern of rows of Crocus

**Reproducedc from “Flowers In Indian Textile Designs” by Vijaya Krishana in
“Journals of Indian Textile History”, Calico Museum of Textiles Ahmedabad
India, no.7, pl.2, 1967**



Plate 29.

Tulip, c.1620 by Nadir ul 'Asr , (Mansur).

**Habibganj Collection , Maulan Azad Library, Aligarh Muslim University,
Aligarh. No.60-1-b(3)**



Plate 30.

**Yellow Narcissus and butterfly, by Muhammad Nadir of Samarqand.
Prince of wales Museum of Western India Mumbai. Photograph: Lance Dane.**



Plate 31.

A Marigold, Single Floral Motif

**Reproduced from “Flowers In Indian Textile Designs” in Vijaya Krishana in
“Journals of Indian Textile History”, Calico Museum of Textiles Ahmedabad
India, no.7, pl. 10, 1967)**



Plate 32.

Plants of Bela

**Reproduced from “Flowers In Indian Textile Designs” by Vijaya Krishana in
“Journals of Indian Textile History”, Calico Museum of Textiles Ahmedabad
India, no.7, pl.10, 1967)**



Plate 33.

**Shahjahan (c. 1630). By Hashim.
Freer Gallery of Art, Washington D.C.**



Plate 34.

Rose, iris and daisy, Circa 1635.

Dara Shukoh's Album, India Office Library, London.



Plate 35.

Champa flower

**Reproduced from “Flowers In Indian Textile Designs” by Vijaya Krishana in
“Journals of Indian Textile History”, Calico Museum of Textiles Ahmedabad
India, no.7, pl.15, 1967)**



Plate 36.

Mughal Patka with Floral and Bird Patterns, Early 17th Century.

Reproduced from “Silk Brocades” by Yashodhara Agarwal, plate.81, p.100.



Plate 37.
Waistband. Mughal, 17th century.
Bharat Kala Bhawan, Benaras.



Plate 38.
Waistband. Mughal, early 17th century.
Bharat Kala Bhawan, Benaras.

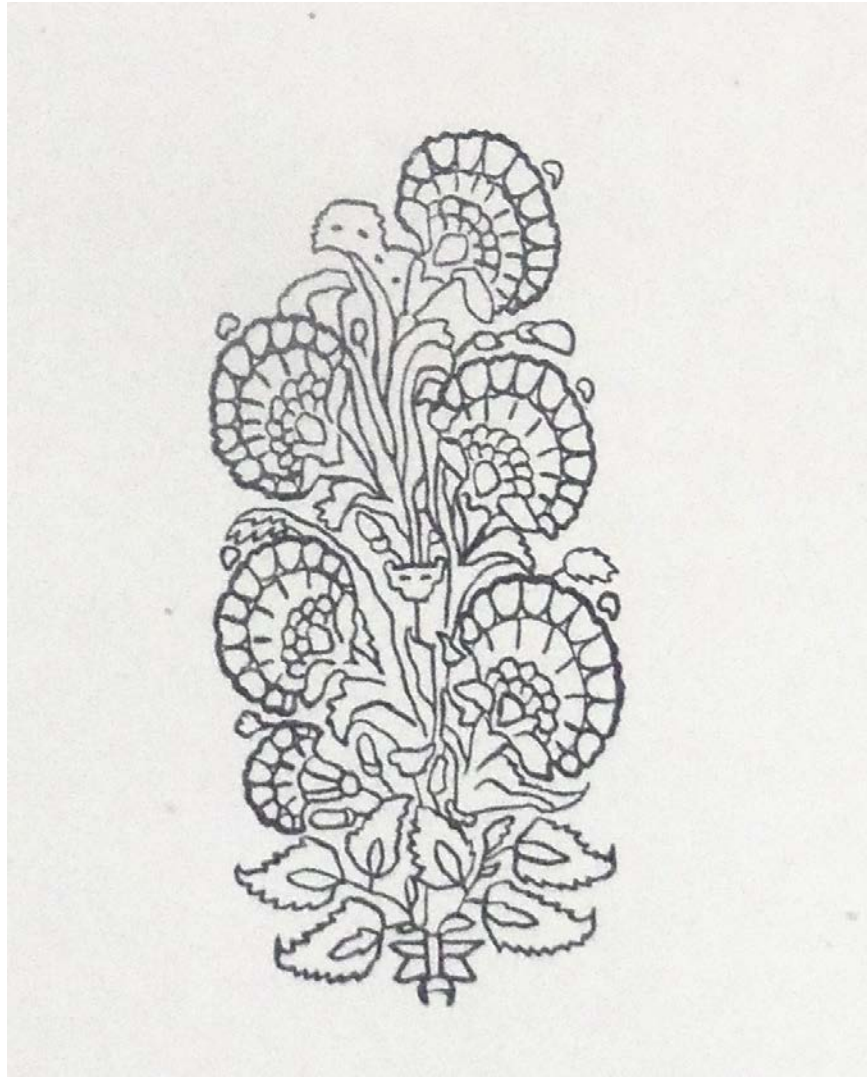


Plate 39.

Cylindrical Buta.

**Reproduced from “Shawls , A Study in Indo-European influence” by John
Irwin,London,1955,p.11**

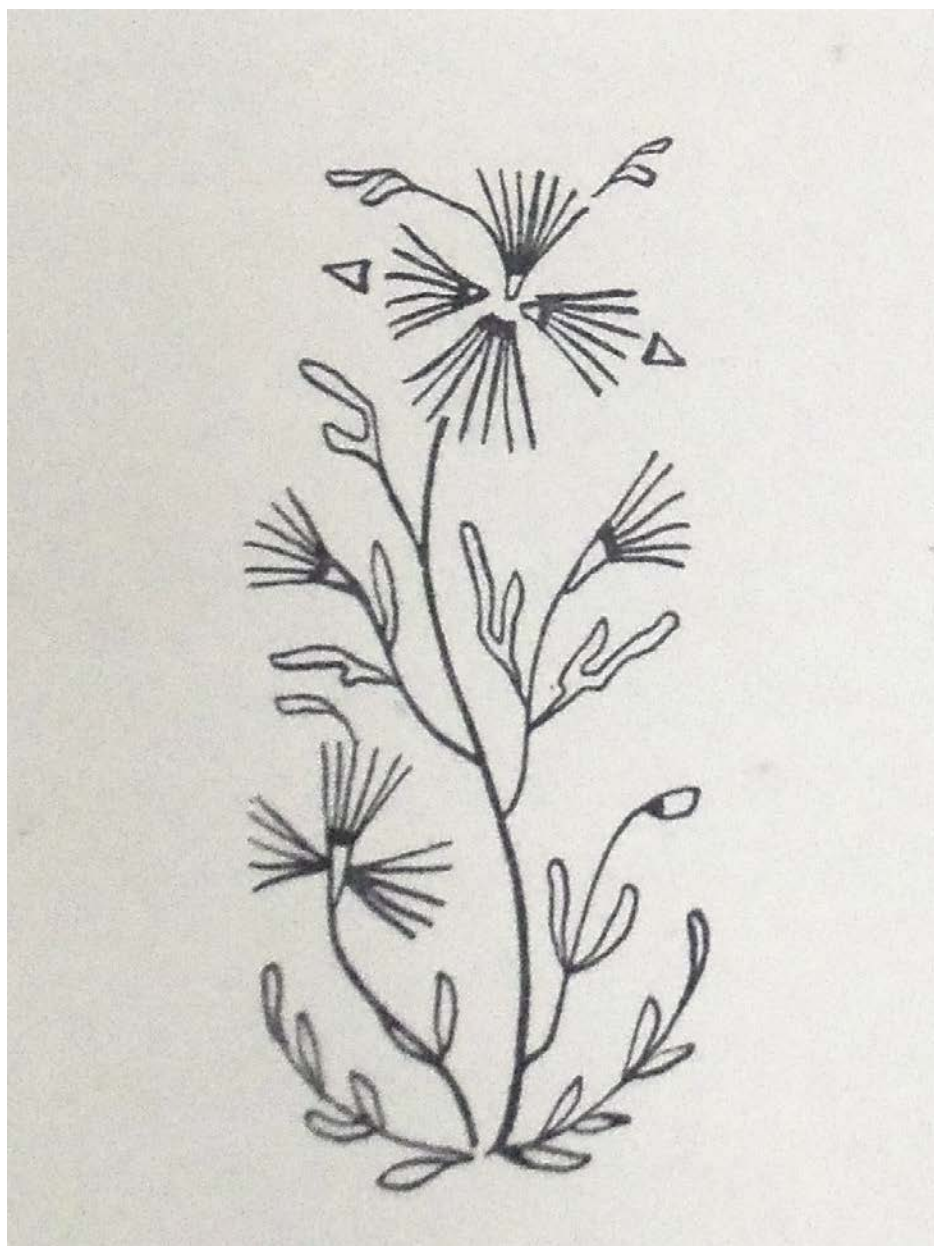


Plate 40.

Cylindrical Buta

**Reproduced from “Shawls, A Study in Indo-European influence” by John Irwin,
London, 1955, p.11.**



Plate 41.

Cotton ginning: the roller and board, *Miftah-ul-Fuzala*,
British Library Or. 3299. f. 100a.



Plate 42.

Cotton-ginning: the cotton-gin, G.Yazdani, *Ajanta, The Colour and Monochrome Reproduction of the Ajanta Frescoes based on Photography*, pl. 12, Palace Scene: Dancing Girl (Mahajanak Jataka).



Plate 43 .

The same instrument as in, *Miftah-ul-Fuzala*

British Library Or. 3299, f.126b.

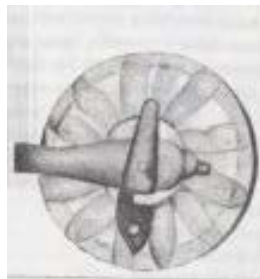


Plate 44.

Spinning wheel: from paintings by Bichitr, c.1630. The wheel is suspended from the wall of a village hut. A peg would need to be inserted into the hole in the pivoted bar to complete the crank-handle.

Reproduced from *Technology in Medieval India c.650-1750* by Irfan Habib.

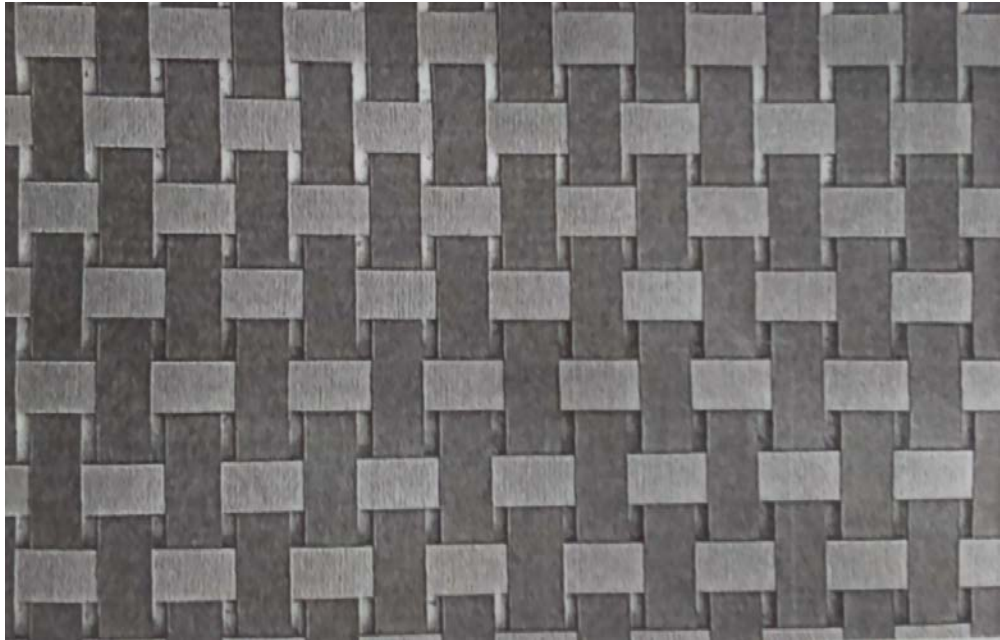


Plate 45.

Diagram of plain weave

Reproduced from Ruth Barnes, Stevan Cohen, Rosemary Crill; “Trade, Temple and Court Indian Textiles from the Tapi Collections”, 2002, Mumbai. p.113

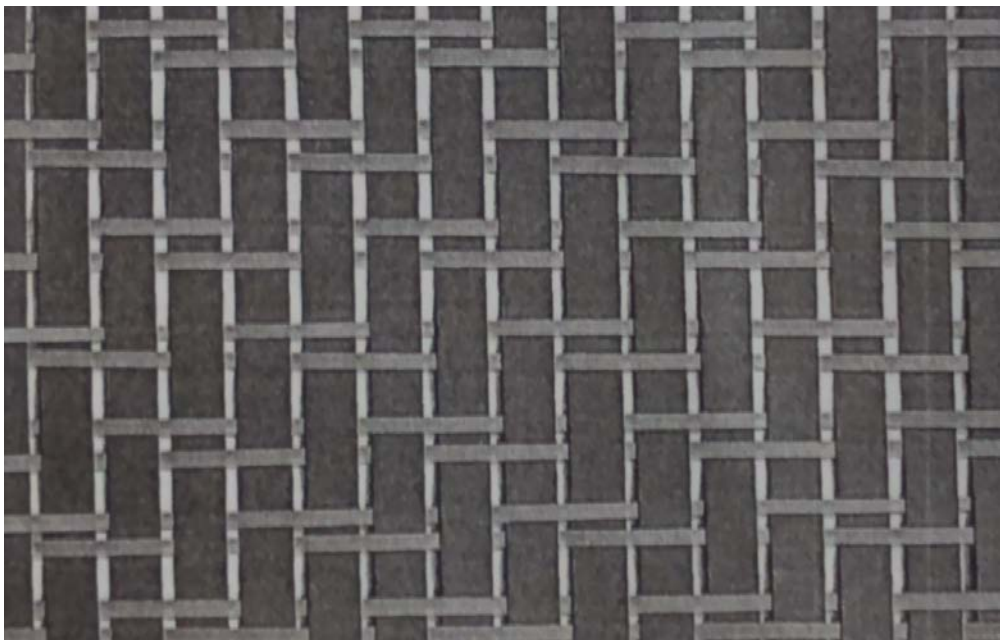


Plate 46.

Diagram of a weft faced 2:2 twill

Reproduced from Ruth Barnes, Stevan Cohen, Rosemary Crill; “Trade, Temple and Court Indian Textiles from the Tapi Collections”, 2002, Mumbai. p.113

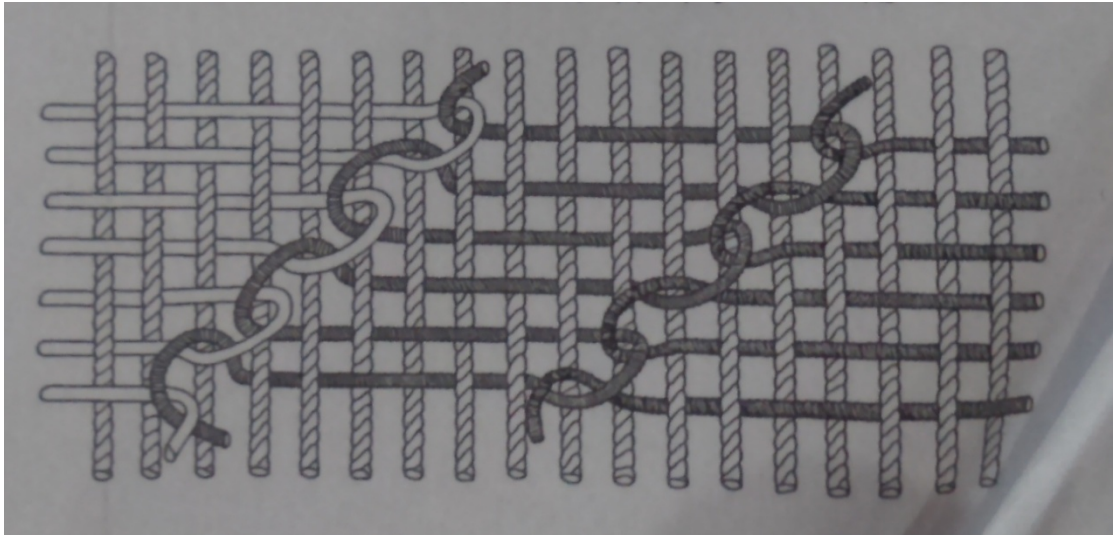


Plate 47.

Diagram of double interlocking tapestry join.

Reproduced from Ruth Barnes, Stevan Cohen, Rosemary Crill; “Trade Temple and Court Indian Textiles from the Tapi Collections”, 2002, Mumbai. p.114.

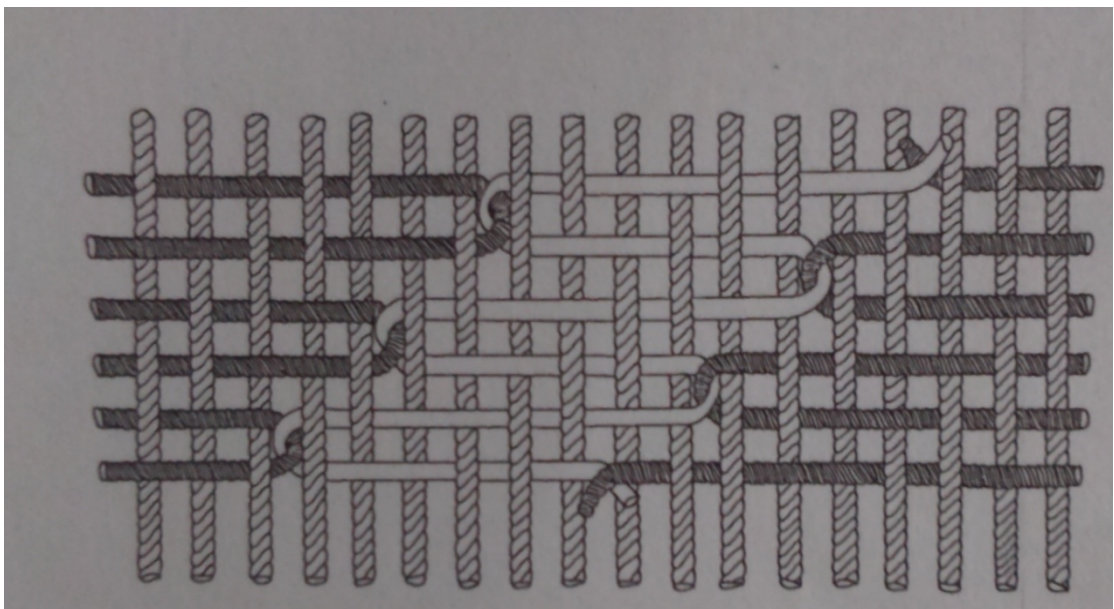


Plate 48.

Diagram of single interlocking tapestry join.

Reproduced from Ruth Barnes, Stevan Cohen, Rosemary Crill; “Trade, Temple and Court Indian Textiles from the Tapi Collections”, 2002, Mumbai p.114



Plate 49 .

Jahangir with tie and dyed patka, Balchand c. 1620.

Chester Beatty Library, Dublin.

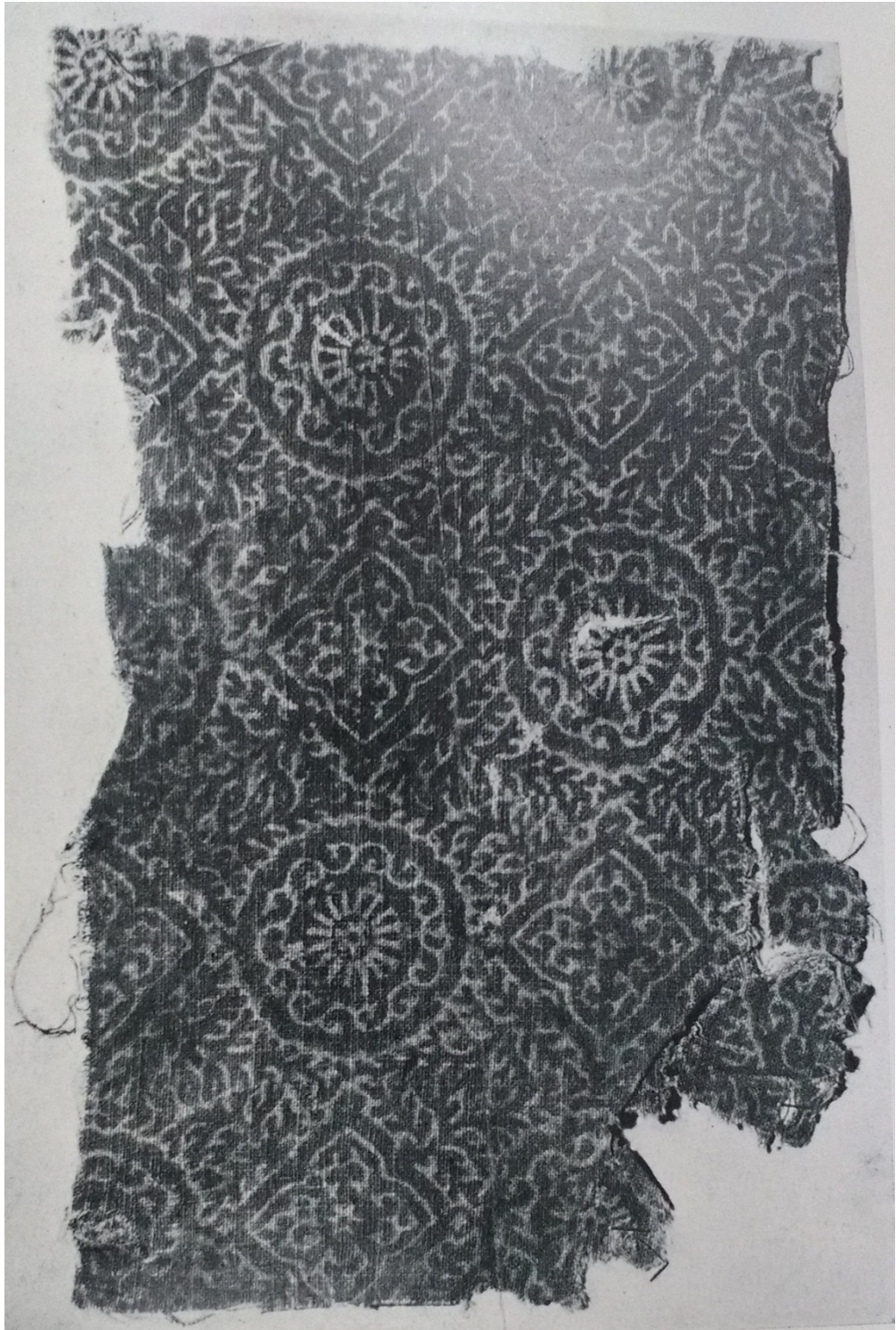


Plate 50.

**A Fragment, Cotton, Block-printed from Western India, 17th century or later
found at Fostat, Egypt.**

Calico Museum of Textiles Ahmedabad. No.4, (Acc.no. c. 638)

GLOSSARY

GLOSSARY

<i>alacha</i>	made of cotton and either hemp or silk.
<i>abrawan</i>	running water, trade name of <i>muslin</i> ; Persian.
<i>addhi</i>	light <i>muslin</i> .
<i>angarkhi</i>	stitched upper garment for men.
<i>asali-tus</i>	under hair of mountain goat.
<i>banda-bandha</i>	<u>ikat</u> of Orissa.
<i>bandhani</i>	tie-and-dye fabric.
<i>boteh/buta/buti</i>	plant pattern.
<i>bandhej</i>	Process of patterning cloth by tie-dyeing, in which the design is reserved on the undyed cloth by tying small spots very tightly with thread to protect them from the dye. Most popular in Rajasthan and Gujarat.
<i>butch</i>	Literally <i>butch</i> , <i>buti</i> , or <i>buta</i> , it means ‘plant’. The motif is sometimes reduced to a floral pattern designed within the form of the plant. Usually a big-sized floral pattern.
<i>bafta</i>	cotton stuffs in A’in.
<i>buta</i>	representations of flowers which are put on fine cloth.
<i>chakdarjama</i>	<i>Jama</i> with <i>chaks</i> (slits).
<i>chogha</i>	Loose, sleeved, cloak-like garment of Turkish origin worn over an inner garment like the <i>angarkha</i> . This front-open, full-length attire is considered to be an appropriate dress for ceremonial occasions. Various known as <i>chogha</i> , <i>chuba</i> or <i>juba</i> .
<i>choli</i>	A short, bodice-like breast garment popular among women in India, from early times worn in many styles; with back covering; with tie-cords; or as extended cloth-pieces with shaped breast pieces. Other terms for <i>choli</i> in classic

	Sanskrit literature are <i>angiya</i> , <i>cholaka</i> , <i>chola</i> , <i>cholika</i> , <i>kanchuka</i> and <i>kancholika</i> .
<i>churidarpaijama</i>	From <i>churi</i> . Or bangle-like gathers or wrinkles. Tight-fitting, trouser-like lower garment with such gathers towards the lower portion.
<i>chadar</i>	wrap, shawl.
<i>chameli</i>	jasmine.
<i>charquab</i>	coat; Persian.
<i>chikankari</i>	white on white embroidery.
<i>chint</i>	variegated or sprinkled, derived from the Sanskrit <i>chitra</i> , i.e. chintz.
<i>Cuttanees</i>	Mixed silk-and-cotton.
<i>Culgars</i>	Printed silk cloth.
<i>chautar</i>	cotton stuffs.
<i>chikin</i>	A kind of embroidery work.
<i>chira</i>	From silk warp (<i>pod</i>) and woollen weft (<i>tar</i>).
<i>do-shala</i>	double shawl or long shawl.
<i>do-ruh</i>	double faced; Persian.
<i>dhakkaimulmul</i>	Muslin made in Dacca in present-day Bangladesh.
<i>dhoti</i>	Long, unstitched fabric used as a lower garment by men almost all across India. The most common wearing style is to wrap it around the waist, gather the rest in front, and take the gathered bit between the legs and tuck behind.
<i>dupatta</i>	Veil/scarf also known as <i>odhani</i> , <i>dupatta</i> , or <i>chunari</i> , draped loosely over the upper part of the body by women.
<i>fota</i>	gold-worked stuffs.
<i>genda</i>	marigold.
<i>ghagra</i>	Skirt with lots of gathers worn by women. The simple <i>ghagra</i> has only one vertical seam, which transforms the

	cloth or <i>ghagrapata</i> into a tube, fastened with drawer-strings. Flared <i>ghagras</i> are made of several gored triangular pieces stitched together.
<i>Ganga-jal</i>	cotton stuffs.
<i>garbasoti</i>	cotton stuffs.
<i>gulbadan</i>	A kind of well-known silk stuff.
<i>himru</i>	Silk and cotton brocaded fabric of Aurangabad, Maharashtra.
<i>ikat</i>	<i>tie-and-dye yarn woven to make a pattern.</i>
<i>izarband</i>	belt or band for trousers.
<i>ikat</i>	meaning ‘to tie’ or ‘to bind’. A dye-resist process in which designs are reserved in warp or weft yarns by tying off small bundles of yarn with palm-leaf strips or similar material to prevent penetration of dye.
<i>jal</i>	net.
<i>jama</i>	upper coat.
<i>jamevar</i>	woven woollen Kashmir shawl with an all-over pattern.
<i>jama</i>	Full-sleeved, knee-length, or longer outer wear for women snugly fitted at the chest with high waist seam and flared skirt. It was tied under the right or the left armpit with tie-cords.
<i>jamdani</i>	Inlaid pattern of extra weft, without floats. Pattern of extra weft, without floats. Earlier, Dacca was famous for producing fine <i>jamdani</i> . Later, Tanda (near Lucknow, Uttar Pradesh) and Varanasi (Uttar Pradesh) also became famous for producing <i>jamdani</i> fabric, from which garments are made.
<i>jilucha</i>	Kind of gown.
<i>zari</i>	gold thread.

<i>kamarband</i>	sash.
<i>kanni</i>	multiple weft patterned Kashmir shawl.
<i>karkhana</i>	atelier, workshop.
<i>karpasa</i>	cotton cloth.
<i>khadi</i>	hand spun and hand woven cotton cloth.
<i>khilat</i>	robes of honour.
<i>kamkhab</i>	gold brocade.
<i>kurdi</i>	from Kurdistan in Iran.
<i>karkhana</i>	State-governed workshop and storehouses established by rulers during the medieval period for the production of things used by them.
<i>kulah</i>	Skullcap.
<i>kurta</i>	Literally ‘tunic, waistcoat, jacket, shirt’. Worn by men and women, the <i>kurta</i> is a slightly loose-fitting, knee-length, and longer outer garment, often with a round neck and side slits.
<i>qasaba</i>	<i>Kind of cap worn by married princesses.</i>
<i>mashru</i>	Fabric woven from silk warp and cotton weft yarns. Literally in accordance with the sharia or the Islamic Holy Law.
<i>muga</i>	Variety of silk.
<i>mothra</i>	checked the and-dye pattern or double <i>laheria</i> .
<i>malmal</i>	a fine <i>muslin</i> .
<i>nakshikantha</i>	<i>Kantha</i> is a hand-embroidered quilted covering of Bengal, usually with geometric and floral motifs. Figurative, patterned kantha is known as <i>nakshikantha</i> .
<i>nima</i>	Type of tunic; modified version of a <i>kurta</i> , usually made of fine material. Also known as <i>nimatanaor nimcha</i> .

<i>paijama</i>	Trouser-like garment, worn by men and women alike. Literally 'leg-clothing'. Also known as <i>churidarpaijama</i> , <i>siddha paijama</i> , or <i>farshipaijama</i> , depending on shape and cut. The <i>paijama</i> varies in girth, length, fit and material.
<i>pashmina</i>	Fabric made from <i>pashm</i> wool.
<i>patka</i>	girdle or <i>kamarband</i> , with very decorative patterns woven or embroidered on its panels, worn usually over a <i>jama</i> by men.
<i>patola</i>	Double <i>ikat</i> of Patan, Gujarat, made with silk thread. Both warp and weft yarns are tied and dyed in a calculative manner, so that once it is woven on loom the entire pattern appears on it.
<i>peshwaz</i>	Long-gown-like dress, consisting essentially of a <i>choli</i> worn rather high and a skirt that has a front opening.
<i>pairahan</i>	Loose, cloak-like shirt reaching down to the feet, used by both men and women in Kashmir.
<i>shalwar</i>	<i>Paijama</i> -like lower garment, baggy and wide at the top, and loosely fitted around the legs and ankles. Worn mostly by women, but also by men, especially in the northwest.
<i>serribaffs</i>	Good quality, fine muslin from Khandesh and the Deccan.
<i>taat</i>	Cotton fabric.
<i>tus</i>	Finest variety of wool obtained from the Himalayan goat.
<i>tafta</i>	silk stuffs.
<i>tanzeb</i>	a small shirt worn under the <i>qaba</i> .
<i>tasar</i>	silk stuffs.
<i>zarbaft</i>	woven cloth that is woven mixed with gold.
<i>zarkash</i>	the person who draws gold and silver wire for <i>kalabattu</i> .
<i>zartari</i>	Any cloth containing gold wire.
<i>zardozi</i>	type of embroidery in which metallic (gold or silver) threads are sewn on satin or velvet.

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